

ROCKY MOUNTAIN MEDICAL JOURNAL

Title Registered U. S. Patent Office

Publication Office

835 Republic Building (1612 Tremont Place).
Denver 2, Colorado
Telephone AComa 2-0547



Table of Contents

January 1959, Volume 56, Number 1

Editorials

"To thine own self be true . . .," 35

Suburbanitis, 36

Modern medical education, 36

Articles

Rheumatic fever prophylaxis with benzathine penicillin G in Wyoming,

Luther E. Giddings, M.D., and Franklin D. Yoder, M.D., Cheyenne, Wyoming, 37

How can we get safe cars?, Horace E. Campbell, M.D., Denver, 41

Nursing education changes to meet service needs of patient care, Mr. Roy R. Prangley and Miss Lillian DeYoung, Denver, 48

Cystic disease of the lung, Stanley W. Henson, Jr., M.D., A. N. Grosboll, M. D., and Stuart Patterson, M.D., Fort Collins, Colorado, 52

Chemotherapy of specific infectious diseases of the lower respiratory tract, (reprint from Diseases of the Chest, Vol. XXXIII, number 4, 1958), 57

Shadow or substance, radiologic reflections, Marcus J. Smith, M.D., Santa Fe, New Mexico, 62

EDITORIAL BOARD

Colorado: Douglas W. Macomber, M.D., Scientific Editor, 1800 High St., Denver, (Chairman of the Board); James R. Leake, M.D., Assistant Scientific Editor, 465 N. Cedar, Littleton.

Montana: Wilbur A. Armstrong, M.D., Scientific Editor, 1231 North 29th Street, Billings, Montana; L. Russell Hegland, Associate Editor, 1236 N. 28th Street, Billings.

Nevada: Wesley W. Hall, M.D., Scientific Editor, 607 N. Arlington Ave., Reno; Nelson B. Neff, Associate Editor, P. O. Box 188, Reno.

New Mexico: Aaron E. Margulis, M.D., Scientific Editor, Coronado Building, Santa Fe, New Mexico; Ralph R. Marshall, Associate Editor, 220 First National Bank Bldg., Albuquerque.

Utah: Richard P. Middleton, M.D., Scientific Editor, Boston Bldg., Salt Lake City; Harold Bowman, Associate Editor, 42 South Fifth East St., Salt Lake City.

Wyoming: Franklin D. Yoder, M.D., Scientific Editor, State Office Building, Cheyenne; Arthur R. Abbey, Associate Editor, P. O. Box 2036, Cheyenne.

Managing Editor: Harvey T. Sethman, 835 Republic Building, Denver 2, Colorado.

Assistant Managing Editor: John W. Pompelli, 835 Republic Building, Denver 2, Colorado.

Ownership and Sponsorship: The Rocky Mountain Medical Journal is owned by the Colorado State Medical Society and is published monthly as a non-profit enterprise for the mutual benefit of the organizations which jointly sponsor it. It is published under the direction of the Board of Trustees of the Colorado State Medical Society, assisted by an Editorial Board representing the sponsoring organizations. It is the Official Journal of the Rocky Mountain Medical Conference and those medical societies who are represented on the Editorial Board listed above.

Advertising: National representative: The State Medical Journal Advertising Bureau, Inc., 510 North Dearborn Street, Chicago 10, Ill.

Subscription: \$3.50 per year in advance, postpaid in the United States and its possessions; single copy 35c plus postage. Subscription is included in medical society dues of sponsoring state medical organizations.

Copyright: This Journal is copyright, 1959, by the Colorado State Medical Society. Requests for permission to reproduce anything from the columns of this Journal should be addressed to the Journal office.

Second Class Matter: Entered as second class matter Jan. 22, 1906, at the Post Office at Denver, Colo., under the Act of Congress of March 3, 1879. Accepted for mailing at special rates of postage provided for in Section 1103, Act of Oct. 3, 1917; authorized July 17, 1918.

Organization

Washington Scene, 64

Montana, 70

Utah, 76

Wyoming, 76

Nevada, 80

Colorado, 80

National affairs, 88

Correspondence, 100

Blue Cross-Blue Shield, 104

Medical Society Officers, 108

ROCKY MOUNTAIN MEDICAL JOURNAL

Title Registered U. S. Patent Office

Publication Office

835 Republic Building (1612 Tremont Place).
Denver 2, Colorado
Telephone AComa 2-0547



Table of Contents

January 1959, Volume 56, Number 1

Editorials

"To thine own self be true . . .," 35

Suburbanitis, 36

Modern medical education, 36

Articles

Rheumatic fever prophylaxis with benzathine penicillin G in Wyoming,

Luther E. Giddings, M.D., and Franklin D. Yoder, M.D., Cheyenne, Wyoming, 37

How can we get safe cars?, Horace E. Campbell, M.D., Denver, 41

Nursing education changes to meet service needs of patient care, Mr. Roy R. Prangley and Miss Lillian DeYoung, Denver, 48

Cystic disease of the lung, Stanley W. Henson, Jr., M.D., A. N. Grosboll, M. D., and Stuart Patterson, M.D., Fort Collins, Colorado, 52

Chemotherapy of specific infectious diseases of the lower respiratory tract, (reprint from Diseases of the Chest, Vol. XXXIII, number 4, 1958), 57

Shadow or substance, radiologic reflections, Marcus J. Smith, M.D., Santa Fe, New Mexico, 62

EDITORIAL BOARD

Colorado: Douglas W. Macomber, M.D., Scientific Editor, 1800 High St., Denver, (Chairman of the Board); James R. Leake, M.D., Assistant Scientific Editor, 465 N. Cedar, Littleton.

Montana: Wilbur A. Armstrong, M.D., Scientific Editor, 1231 North 29th Street, Billings, Montana; L. Russell Hegland, Associate Editor, 1236 N. 28th Street, Billings.

Nevada: Wesley W. Hall, M.D., Scientific Editor, 607 N. Arlington Ave., Reno; Nelson B. Neff, Associate Editor, P. O. Box 188, Reno.

New Mexico: Aaron E. Margulis, M.D., Scientific Editor, Coronado Building, Santa Fe, New Mexico; Ralph R. Marshall, Associate Editor, 220 First National Bank Bldg., Albuquerque.

Utah: Richard P. Middleton, M.D., Scientific Editor, Boston Bldg., Salt Lake City; Harold Bowman, Associate Editor, 42 South Fifth East St., Salt Lake City.

Wyoming: Franklin D. Yoder, M.D., Scientific Editor, State Office Building, Cheyenne; Arthur R. Abbey, Associate Editor, P. O. Box 2036, Cheyenne.

Managing Editor: Harvey T. Sethman, 835 Republic Building, Denver 2, Colorado.

Assistant Managing Editor: John W. Pompelli, 835 Republic Building, Denver 2, Colorado.

Ownership and Sponsorship: The Rocky Mountain Medical Journal is owned by the Colorado State Medical Society and is published monthly as a non-profit enterprise for the mutual benefit of the organizations which jointly sponsor it. It is published under the direction of the Board of Trustees of the Colorado State Medical Society, assisted by an Editorial Board representing the sponsoring organizations. It is the Official Journal of the Rocky Mountain Medical Conference and those medical societies who are represented on the Editorial Board listed above.

Advertising: National representative: The State Medical Journal Advertising Bureau, Inc., 510 North Dearborn Street, Chicago 10, Ill.

Subscription: \$3.50 per year in advance, postpaid in the United States and its possessions; single copy 35c plus postage. Subscription is included in medical society dues of sponsoring state medical organizations.

Copyright: This Journal is copyright, 1959, by the Colorado State Medical Society. Requests for permission to reproduce anything from the columns of this Journal should be addressed to the Journal office.

Second Class Matter: Entered as second class matter Jan. 22, 1906, at the Post Office at Denver, Colo., under the Act of Congress of March 3, 1879. Accepted for mailing at special rates of postage provided for in Section 1103, Act of Oct. 3, 1917; authorized July 17, 1918.

Organization

Washington Scene, 64

Montana, 70

Utah, 76

Wyoming, 76

Nevada, 80

Colorado, 80

National affairs, 88

Correspondence, 100

Blue Cross-Blue Shield, 104

Medical Society Officers, 108

AS I APPROACH the sundown of life as a disciple of Aesculapius and look back upon a long span in which it has been my privilege and honor to serve my fellow man, many thoughts and observations traverse that section of my cerebral

"To Thine Own Self Be True . . ."

cortex which is allocated theoretically to the sphere of reason.

One indelible question keeps popping up from time to time: "What is wrong with the medical profession of today?" and, from this state of inquisitiveness, keeps coming into view, just as in turning the leaves of a book, numbers of other queries. Why does not the medical profession of today enjoy the prestige and popularity with the American public it did one or two or more generations ago? Is this the fault of a changing world in which relative esthetic values are lost in a supercharged speed of living? Or are we basically at fault?

The answer is not forthcoming in a simple "yes" or "no." A careful phase of "soul-searching" should first be carried out. Just what is wrong with us as practitioners of the healing art? Almost any problem can be resolved if each party would meet the other just a little more than half the way. Good understanding, long friendship is a *modus operandi* that is difficult to surpass.

It has been my thought for quite some time that we have no major problems in medicine today that we ourselves have not created either directly or indirectly through errors of omission or commission. Think this over, carefully. Had we possessed the foresight and vision of a modern Alfred Lord Tennyson and a quarter of a century ago only "dipped into the future," we might have had a better answer to other questions proposed by the "Great White Father" of the early depression years. Problems created by the increase in the charity patient load, care of the aging, new public health concepts, cre-

ation of the Social Security program and welfare state, might all have been aborted, and subsequently a normal, legitimate conception might have led to the birth of a much sounder medical policy. Had we been on the *offensive* team then, we would not be on the *defensive* now.

But let us go a little further and answer a few questions . . . after we have accepted an injection of truth serum. While I cannot agree with all the philosophies of one of the recent Past Presidents of the A.M.A., I do remember very vividly one of his better quotes: "The purpose of the doctor today is to take care of sick folks. Period!"

Is our visual acuity so defective today that we need to wear highly refracted spectacles in order to see through or around the letter S with two parallel vertical bars superimposed? Kindly peruse that one for a while.

Do we, as followers of Hippocrates, enjoy an honest and fraternizing spirit in our associations with one another—whether it be professional or social—or are we so engrossed with petty jealousies that when asked by a patient, "What do you think of Doctor X?" we raise a caustic supra-orbital ciliary appendage?

Do we find an excuse to absent ourselves from staff and component medical society meetings and then quickly criticize policies which are suggested by those who attend such gatherings, because those present have been dedicated to the role of being a well indoctrinated and dedicated physician, and take the necessary time-out to express their loyalty by their presence?

Are we following the philosophy of the Super-Duper Playboy King of France in believing "it will last my time, why worry about the next generation," or are we truly concerned with "What of tomorrow?"

Yes, my Fellow Practitioners, it's high time we were doing some serious soul-searching. To thine own self be true—if thou art honest!

The Old Family Physician

ALL IS NOT WELL in Suburbia. So the psychiatrists report. We have not investigated first hand because we always beg off when invited to "the country." It is much too congested for us. Apparently suburban life has

Suburbanitis*

Too many neighbors, too many children, too many dogs, too many automobiles. (Ed. note: this does not mean that we personally disapprove of dogs, children, automobiles or people. We are just giving you the psychiatric scuttlebutt.)

Seems that the greatest mass migration in history has transformed the bucolic into just plain colic. Nature's harmonies have been curdled by screeching saws and thumping hammers, by puffing bulldozers and grinding cement mixers. Noisy landscapers also busy themselves improving on God's handiwork. When every square foot of farmland or rustic dell has been worked over and things seem about to quiet down, comes an invasion of excavators for swimming pools and stone masons building barbecue pits. Carports are erected to replace garages which have been converted into rumpus rooms or extra bedrooms. No house ever gets quite finished.

The only urban tranquility now to be found is in the heart of our big cities. There, when the commuters have gone home and the cleaning crews have finished, a soothing silence ensues. Have you ever visited your office on a weekend? Much to your surprise you can park plunk in front of the building. The elevators do not reek with a noxious mixture of cigar smoke and stale perfume. The corridors are spick-and-span—and quiet.

A member of the station wagon set recently unburdened himself as follows: "Suburbia is for the birds—and the bees. I, for one, would like to give it back to them." But since almost everyone has migrated to the suburbs, about the only refuge left is to move further out or migrate back to town. Thus another cycle seems to be running its course. Meanwhile, the developers and their agents have certainly "turned over" a lot of real estate.

*By our friend, Herbert A. Leggett, Phoenix, Ariz. Reprinted from Arizona Progress.

TIME AND MONEY, two precious commodities for all of us, have long been a serious problem for the man wanting a medical education. It is gratifying to note that many universities, in addition to being aware of

Modern Medical Education

the problem, are actually doing something constructive about it. Here is an outstanding example as described by Gunnar Gundersen, then A.M.A. President, in his address entitled "Changing Concepts in Medical Education" given before the New Mexico Medical Society last May.

"Johns Hopkins University is one example of a medical school that is projecting a revised training program. This program will shorten the training course by one or two years, reduce the total cost of medical training through this time reduction, and increase emphasis on creative and independent study. The first four years of this five-year course will be based on an academic year increased from the usual 32 weeks to 40 weeks. The fifth year, representing a rotating internship in the Johns Hopkins Hospital, will cover the entire 52-week year.

"However, in place of the current degree requirement for admission, carefully selected students may be admitted to this five-year program after two years of college. This will make it possible for the talented student to complete in seven years instead of the current nine. At the same time, other students will have the opportunity to enter after either three or the usual four years of college.

"A liberal education will be provided through interweaving of courses in the humanities and the medical sciences. The curriculum is so designed that during the five years, the iron curtain barrier between liberal arts and medical science will be broken to the mutual advantage of the medical school and of the rest of the university."

We hope that savings such as these can be designed for more of our medical schools and their students. Then perhaps we can revive the adventures of *Young Doctor Kildare*.

SHADOW OR SUBSTANCE, radiologic reflections, a new series beginning on page 62.

Rheumatic fever prophylaxis with benzathine penicillin G in Wyoming*

Luther E. Giddings, M.D., and Franklin D. Yoder, M.D., Cheyenne, Wyoming

The Rocky Mountain Region has a high incidence of rheumatic fever and rheumatic heart disease. This study showed a thirteen-fold decrease in recurrence of the disease by use of penicillin prophylaxis. There were three methods of administration and a suggestion of the paper is that one method may be superior to the other two. There were no severe reactions to the medication among 636 patients studied over a two-year period.

RHEUMATIC FEVER IS A DISEASE that usually can be prevented by early detection and adequate treatment of streptococcal infections. Adequate treatment has, however, been available only since the advent of penicillin, and there still remain many pitfalls in both diagnosing and treating streptococcal disease. Consequently, many cases of rheumatic fever occur needlessly each year. Recurrences of rheumatic fever have been reported in as

many as 50 per cent of these cases who undergo subsequent attacks of streptococcal disease¹. In order to prevent these recurrences it has been recommended by the American Heart Association that after an attack of rheumatic fever, a patient should be placed on a prophylactic regimen against streptococcal infections which should continue indefinitely². It has been shown that benzathine penicillin G and many other penicillin preparations are an effective prophylactic measure against such infections when used properly in either oral or parenteral form³.

The Rocky Mountain area, New England, and the Great Lakes region are the three areas in this country which annually have unusually high death rates from rheumatic fever and rheumatic heart disease⁴. Desiring to help the many residents of the state who previously had rheumatic fever, the Wyoming Department of Public Health early in 1956 made available benzathine penicillin G in both oral and parenteral forms to physicians for free distribution to such patients as required it for prophylactic purposes. Over 600 patients have since taken advantage of this opportunity. It is the purpose of this paper to describe the results of this program to date.

Methods

Special forms have been furnished to physicians to fill out and return to the State Department of Public Health as applications for benzathine penicillin G. One of these was to be filled out for each patient with a previous attack of rheumatic fever for whom

*Data furnished by the Wyoming Department of Public Health, Division of Preventive Medicine. Contribution of the Communicable Disease Center, Public Health Service, U. S. Department of Health, Education and Welfare, Atlanta, Georgia. Dr. Giddings is with the Encephalitis Investigations Unit, Greeley Field Station, CDCA, Greeley, Colorado. Dr. Yoder is the Director, Wyoming Department of Public Health, Cheyenne, Wyoming, and is also the Wyoming editor of the Rocky Mountain Medical Journal. Presented to the Medical Staff, Laramie County Memorial Hospital, May 27, 1958.

the prophylactic preparation was desired. These forms required, among other things, name, age, and sex of the patient, date of the initial attack, and the number of subsequent attacks. Unfortunately, not all questions were answered on every form so that available data is not as complete as might be desired. Where a question was left unanswered by a physician the patient was omitted from consideration in the particular category being studied. Data were compiled from these forms to show the average age at onset of the initial attack, the average time lapse between onset of the initial attack and the start of prophylaxis, and the number of recurrences during this period. The two latter figures were then used to calculate the number of recurrences that a theoretical "average" patient would have been expected to undergo in a five-year period before the institution of prophylaxis.

Upon receipt of the application, a three-month supply of benzathine penicillin G was sent to the physician. It was available as tablets or in parenteral form as ordered. The tablets (200,000 units) were to be taken by the patient on a one-per-day basis. In June, 1957, the State Department of Public Health announced that it would thereafter furnish two tablets per day to those patients whose physicians desired such dosage. The parenteral form (1,200,000 units) was to be given intramuscularly once each month.

As the patient's supply became low near the end of the three-month period a second, short form was sent to the physician to remind him to reorder a new supply. On the short form the physician was requested to answer whether the patient suffered any recurrences during the three-month period or had any undesirable side effects from the benzathine penicillin G. When reactions were reported a follow-up letter was sent to the physician to determine the type and degree of involvement. Throughout the study it has been necessary to depend upon the judgment of each individual physician in making a diagnosis of rheumatic fever since no convenient way exists of checking work done over such a wide geographic area. The following data were compiled from the short forms: Average duration of prophylaxis,

average number of recurrences per patient, per cent of those on each type of prophylaxis that had undesirable reactions, and types of reactions that were encountered. The expected number of recurrences for a theoretical "average" patient during a five-year period while undergoing prophylaxis with the substance under discussion was calculated from the first two figures. This figure was then compared with the one derived for an "average" patient prior to the institution of prophylaxis. In addition, recurrence rates were calculated and compared for patients in the following three categories: those on the parenteral preparation, those on one tablet each day, and those on two tablets each day.

Results

Six hundred and thirty-six patients have made use of this program since its inception. Three patients have expired and eighty-four have ceased participating in the plan. None of the deaths was attributed to either rheumatic fever or rheumatic heart disease. Most of those who ceased participating did so because of residence changes which rendered them ineligible for further help. Several stopped because of sensitivity to the penicillin preparation while one changed to a sulfa preparation for the same reason. There have been seven recurrences and six side reactions reported from among the patients while on prophylaxis.

Average age at onset of the first attack of rheumatic fever was ten years with extremes of one and forty-four years. Age distribution may be noted in Table 1. Sex data was available for 603 of the patients. Two hundred and seventy-eight (46.1 per cent) were males and 325 (53.9 per cent) were females.

Average time lapse from the first episode of rheumatic fever until the patient was started on prophylactic penicillin was 3.19 years (see Table 2). The patients averaged 0.739 recurrences during this time period with extremes of none and sixteen. From these two sets of figures it can be calculated that the average patient would have been expected to undergo 1.16 recurrences in a five-year period prior to being placed on prophylaxis.

TABLE 1
Age distribution of cases at onset of
initial episode of rheumatic fever

Age	Number
0-3	34
4-7	186
8-11	181
12-15	92
16-19	28
20-23	9
24-27	7
28-31	7
32-35	8
36-39	7
40-up	3
Total	562

Average duration of prophylaxis was 0.63 year, with extremes of none (those who had just recently started) to two years. The average number of recurrences during this period was 0.011. No patient had more than one recurrence while on prophylaxis. From these figures it can be calculated that the average patient, while on a prophylactic regimen with benzathine penicillin G, could be expected to undergo 0.09 recurrences in a five-year period.

It will be noted in Table 3 that the majority of the patients have been on the oral preparation, one tablet each day. The recurrence rate among this group was 1.3 per cent which is similar to the recurrence rate among those on the parenteral preparation (1.5 per

cent). It would appear at first glance that oral penicillin, two tablets each day, is by far the most effective means of preventing recurrences among those being considered here. Possible reasons for this will be discussed in subsequent paragraphs.

Five reactions occurred on oral penicillin and one on parenteral penicillin to give reaction rates which are much alike, as will be noted in Table 4. Also noted are the types of reactions as reported. No reactions occurred which could be classified as "serious."

Discussion

This study substantiates work done by previous investigators who have concluded that both oral and parenteral benzathine penicillin G are effective in decreasing recurrent attacks of rheumatic fever³. As noted in preceding paragraphs, the use of this substance in Wyoming has brought about a substantial decrease in recurrences of rheumatic fever. The decrease in expected recurrences per five-year period from 1.16 before prophylaxis to 0.09 while on prophylaxis represents a thirteen-fold decrease in incidence. Bland and Jones, in a long-term study of the natural history of rheumatic fever, noted that the recurrence rate remained roughly stable for the first five years after the initial attack and then slowly began to decline⁶. In the present study the average time-lapse from onset of initial attack of rheumatic fever to completion of the study was less than four years. Consequently, it would not seem likely that much of the decreased incidence noted could be attributed to changes within the

TABLE 2
Average duration and number of recurrences of rheumatic fever and the expected number of recurrences per five-year period before and while taking prophylactic benzathine penicillin G.

	Number of patients with information available	Total duration (pt.-years.)	Average duration (years)	Total number of recurrences	Average number of recurrences	Expected recurrences per 5-year period
Before prophylaxis	543	1730	3.19			
	463			342	0.739	1.16
With prophylaxis	636	400.5	0.63	7	0.011	0.09

TABLE 3
*Recurrences of rheumatic fever while
taking prophylactic benzathine
penicillin G*

Type preparation	Number of cases	Recurrences	Per cent of cases with recurrences
Oral penicillin, one tablet per day.....	469	6	1.3
Oral penicillin, two tablets per day....	99	0	0.0
Parenteral penicillin	68	1	1.5
Totals	636	7	1.1

individuals themselves or to their environment.

Six of the seven recurrences reported were among patients on the oral preparation, one tablet per day. How many of these could have been avoided by persistent use of the drug is not known but several physicians have noted in letters to the authors that their patients who had recurrences were not too dependable. The parenteral preparation is generally felt to give more lasting blood levels and has the added advantage of taking care of those patients who cannot be depended upon to take the oral preparation. This study, however, revealed that the incidence of recurrences among those on one tablet per day (1.3 per cent) was similar to the incidence for those on the parenteral preparation (1.5 per cent). The one recurrence among those on parenteral penicillin occurred within four weeks of the last pre-

vious injection. As noted previously, there were no recurrences among those who took two tablets each day. This may partly be a reflection of the small number of patients (ninety-nine) involved. Also of importance is the fact that the time period during which two tablets were taken was rather short and that two tablets gives a higher, more persistent penicillin blood level.

No severe reactions were seen to any of the preparations. The incidence of reactions was similar in the three groups (see Table 4) with an average of 0.9 per cent. A mild rash was seen in three of the six cases, one had nausea and vomiting each time the oral preparation was ingested, and the type of reaction in one case is unknown to the authors. One individual had a febrile reaction each time the parenteral preparation was given. A number of individuals complained of pain at the site of injection but this should be expected with preparations of this type and cannot properly be classified as side-reactions. At most the reactions were of minor importance when compared to the value of the drug in preventing recurrences of rheumatic fever.

There are a number of factors inherent within a study of this type which could possibly lead to error in the final calculations. This includes such factors as differences in criteria for diagnosing rheumatic fever and the fact that some cases were eliminated because the number of recurrences had been listed as "many" rather than as a specific number. The former would tend to elevate the total number of recurrences while the latter would tend to lower it. Another factor of possible importance is that the average

TABLE 4
Undesirable reactions to prophylactic benzathine penicillin G

Type preparation	Number of cases	Reactions	Per cent of cases with reactions	Types of reactions
Parenteral penicillin	68	1	1.5	Febrile
Oral penicillin, two tablets per day.....	99	1	1.0	Rash
Oral penicillin, one tablet per day.....	469	4	0.9	Rash, nausea, vomiting
Totals	636	6	0.9	

time duration is of considerable difference for the two groups. It is felt by the author, however, that this, as well as the other inherent errors, would not significantly alter the over-all results of this study.

Summary

1. Six hundred thirty-six individuals who have had previous attacks of rheumatic fever have been furnished for varying periods of time, free of charge, prophylactic benzathine penicillin G by the Wyoming Department of Public Health.

2. A thirteen-fold decrease in recurrences of rheumatic fever has occurred since this plan was initiated. Comparisons are made of the efficiency of three methods of administration in preventing such recurrences.

3. Undesirable side-reactions occurred in 0.9 per cent of all patients with little difference noted between the different routes of administration. No severe reactions were seen.

4. Age distribution at onset of the initial attack is noted as is the sex distribution. •

references on 109



How can we get safe cars?

Horace E. Campbell, M.D., Denver*

*Faulty automobile design is
responsible for many
highway deaths and injuries.*

ANYONE WHO HAS ANY RELATION whatsoever with the motorcar (and what pedestrian does not?) should read and consider the article by Paul W. Kearney in *Harper's* for February 1957. At long last our motorcar death and injury problem is getting the kind of attention it deserves. For too long we have been "viewing with alarm" and attempting by slogans to cure a situation which requires a bolder attack. The development and present status of the situation has been covered in an excellent manner by Kearney. What concerns us here is the solution proposed by Kearney in the closing paragraphs of his paper, i.e., the institution by the motorcar industry in cooperation with the automobile insurance companies of an impartial testing laboratory, "logically under the auspices of the Society of Automotive Engineers," similar to the Underwriters' Laboratories and

the testing body of the American Gas Association.

Impartiality lacking

There can be no question but that these latter two organizations have done an excellent job in policing their respective industries. If the analogy can hold true, the organization suggested by Kearney could achieve the result so desperately needed. But, with Patrick Henry, I judge the future by the past. The record of the Society of Automotive Engineers, the Automobile Manufacturers Association, and of the dominating personalities in these organizations, gives little hope that we can expect a solution from these sources. We will examine this record.

For example, the Chairman of the President's Committee for Traffic Safety is a prominent figure in the motorcar world, and in none of the reports, findings, agenda, or recommendations of this Committee do I find any of the criticisms of motorcar design or any of the recommendations for modification of that design that are brought out in Mr. Kearney's paper. I judge that this is not accidental. And yet, a recent report by the

*Chairman Automotive Safety Committee, Colorado State Medical Society.

Automobile Crash Injury Research group of Cornell University Medical School reads, "it becomes apparent that life or death often depends upon circumstances directly related to design."

Orchids for Ford and Chrysler

It should be pointed out at once that the Ford Motor Company and the Chrysler Corporation have each contributed \$200,000 to the Cornell program, and that Ford, to its eternal credit, has had the courage to penetrate the silence barrier which has so long hidden the facts of crash safety from the motoring public. There is much evidence that both Ford and Chrysler desired to introduce safety features earlier but were deterred by the attitude of the "industry in general." Only recently has the Ford Motor Company become a member of the Automobile Manufacturers Association, and it is yet to be seen whether its coalition with Chrysler can break the stranglehold which has been maintained on this organization.

To illustrate the unrealistic and negative approach which a large segment of the industry has taken in the promoting of safety factors in automobile design, I quote from the published testimony before the Subcommittee of the Committee on Interstate and Foreign Commerce (the Roberts Committee) at a hearing in Detroit on August 25, 1956. It is significant for our discussion that it involves both the Society of Automotive Engineers and the Automobile Manufacturers Association.

The final portion of the presentation will deal with the prevention of injuries to the occupants of a car in the event of an accident, which covers the interior. Now, I think on that part of the story, it is logical that we should begin by discussing bumper and front end sheet metal. . . .

First, the following general conclusion is taken from a November, 1946, report which incidentally resulted in the present automobile bumper-height standard. This report was prepared by the Bumper Committee of the Society of Automotive Engineers Technical Board at the request of the Engineering Liaison Committee of the Automobile Manufacturers Association. The quotation is this:

"A limitation on the maximum strength of the bumper should be considered in the interest of protecting passengers from severe impact in the case of collision. It might be an excellent idea to have a bumper fail under high impact loads to absorb as much energy as possible, thereby

relieving the passengers of the high deceleration that accompanies severe impact."

[We omit two paragraphs that we consider irrelevant.]

The stiffness of the individual stampings plus that of the integrated assembly in present front-end designs provide deformation characteristics and the over-hang provides space through which the deformation can occur. That is what does the protecting of human lives. However, as the crash impact velocity and the deceleration rate values go up, the problem of increased passenger protection becomes exceedingly more difficult. (Hearings, page 359.)

Interpretation of testimony

What the witness was saying, in non-technical language, is this: "We should not make the bumper too strong, but should allow it to fail so the car structure may deform and absorb energy." Now, this car structure consists of our expensive and fragile grilles, headlights, fenders, radiators, fans, and sensitive steering adjustments, which our mechanics consistently state can be deranged by getting our front wheels caught in the street-car tracks. All too often, in even mild crashes, these flimsy front structures, which do not absorb much crash energy, permit the engine to contact the obstruction, with severe damage to the engine and its mounts, and with greatly increased decelerative forces being transmitted to the car occupants.

Now, let us hear what a disinterested engineer has to say. Professor Bruhn of a well known Midwestern university has long been concerned with problems of deceleration and crash-energy absorption. He writes, "Our present car is quite inefficient in absorbing crash energy and too expensive, since a good crash causes expensive car damage. The structure forward of the car radiator at present absorbs relatively very little crash energy. Thus, most of the car stopping resistance takes place when direct contact is made with the car frame, engine, etc. A crash unit can be developed to give fairly uniform resistance while being crushed and thus lower the car deceleration factors under reasonable crash velocities to that range which the human body can withstand if properly restrained. By redesigning the car carry-through structure just aft of the crash unit, I can see no reason why reason-

able head-on crashes should cause expensive car damage."

Professor Ryan, of Minnesota, agrees with these principles and goes on to say, "Automobiles are not now, nor have they ever been, designed for collision impact, either structurally or for passenger safety. Seat belts have been used for a long time as human restraints in automobiles. Controlling the deceleration of the car makes the use of seat belts successful. Hydraulic energy-absorbing bumpers level out the impact forces to a minimum for a longer time and put the least load on those supported by seat belts."

The quoted testimony ridicules the energy-absorbing bumper by first developing the idea that under the best of circumstances, i.e., brakes, tires, and road surface, the fastest stop that can be achieved under normal operation, i.e., the "panic" stop, is about twenty-nine feet per second per second, 0.9 G deceleration. Then it is said that to achieve this kind of stopping in a crash we would have to have a bumper that extended in front of the car for a distance of fifteen feet! This indicates the attitudes, mental processes and the lengths (no pun intended) to which some of the manufacturers will go in their efforts to perpetuate the *status quo* and what they consider to be their best economic interests.

Exactly this same line of reasoning, with the same illustrations, is to be found in a paper by Mr. Karl M. Richards, a Secretary of the Automobile Manufacturers Association, in *AMERICAN HIGHWAYS* for April, 1958.

Facts on deceleration

No serious student of the decelerative problem suggests that the impact to the car occupants should be reduced to 1 G. All are agreed that 15 G or 20 G, with seat belts or other form of passenger stabilization, is quite reasonable; and evidence is accruing that even higher decelerations, up to 50 G, can be absorbed with only a belt without significant injury. To reduce the impact to 15 G at 20 miles per hour, *without damage to the car structure at all*, the bumper would need to be only 10.8 inches deep; and for a 40 mph impact with a concrete wall, the energy absorbing front-end structure would need to be only 24 inches deep to re-

duce the impact to the passengers to 26.7 G and to protect the structural elements of the car completely. This would increase the overall length of our cars not at all and simply put to good use the two feet or more of space in front of the radiator that is now wasted.

Professor Bruhn's comment on the quoted testimony is, "In my opinion, this comment on bumpers is completely absurd, as 0.9 G has nothing to do with crash safety design." Professor Ryan writes, "Seats should be constructed so as not to add their weight to the person on the seat belt. Further, the dash should be recessed below the windshield to avoid striking the head. Also, the steering wheel should be kinematically collapsible and automatically retract against the windshield out of the way of the driver as he swings forward on his belt."

"Engineers know how to do these things. It is to their ever increasing shame that they have not utilized this knowledge."

The important aspect of this entire matter is that neither the Society of Automotive Engineers nor the Automobile Manufacturers Association under its present leadership has evinced either the competence or the desire to meet the basic mechanical and physical needs of the automobile crash injury problem. This is not to say that both qualities are lacking, but certainly one or the other.

Standards for safety

One of the most revealing situations in regard to the Society of Automotive Engineers is the story of their contest with the American Standards Association in setting up seat belt standards.

First, some idea of what the American Standards Association is and what it attempts to accomplish. It was organized in 1918 by five engineering societies to provide the means by which organizations interested in standardization might cooperate effectively in the development of nationally acceptable standards and avoid duplication of effort. In 1920, a conference called by the National Bureau of Standards, representing labor, industry and government, had requested the organization to enlarge its program in order to include a comprehensive list of safety standards. Over the years, this work has grown so that now there are about

1,400 American Standards of which about 160 are concerned with safety and health. From an organization of five societies, the ASA now includes 104 national trade associations and technical societies, with 2,300 companies having membership in the organization.

The committees, organized to prepare standards, are balanced committees as to representation of the various groups concerned. In the safety field, committees might be balanced among distributors, users, manufacturers of equipment, technical groups, insurance organizations, and governmental agencies. No one group may have representation greater than one-third without the consent of all other groups.

A standard is initiated by some national group suggesting the initiation of a project, a conference is called of the national groups concerned to learn if standardization is desirable, and the actual work placed under one or two sponsors. When the standard is developed, it is sent to sectional committees, sponsors, and finally to the ASA for approval.

Seat belt project blocked

To this large, stable, highly representative organization, then, were sent requests from the Association of Casualty and Surety Companies and the Industrial Safety Equipment Association dated respectively November 30 and December 3, 1954, requesting a project on the specifications for automobile safety belts.

Mr. T. N. Boate, representing the Association of Casualty and Surety Companies, explained that the ACSC maintained an Accident Prevention Department which carried on a nation-wide program. During the past two years they had tried to keep abreast of the work of the Cornell Automotive Crash Injury Research program, and as a result they had become convinced that the use of seat belts would definitely serve to reduce the number of automobile deaths and injuries (*italics mine*). Both he and Mr. V. P. Gopcevic, representing the Industrial Safety Equipment Association, agreed that for many reasons, and from many points of view, there was an urgent need for a set of national specifications for the automobile seat belt.

To make a long story short, a communica-

tion of May 10, 1956, relates "that the request for the initiation of a project for the development of specifications for automobile seat belts is not supported by a consensus of those substantially concerned."

The project was blocked at every turn by the Society of Automotive Engineers and the Automobile Manufacturers Association, to the extent that an industry vice president, speaking for the SAE and Automobile Manufacturers Association, said that "if the ASA went ahead with its project the industry might make one of three moves: first, it might resign as a member of the ASA; second, instead of resigning it might reduce its financial support to ASA to cover only its share of the costs of technical standardization work in which it as an industry was really interested; or third, it might refuse to participate in standardization projects in its area which might be undertaken over its objection."

Changing of the guard needed

Thus, it is seen quite clearly that unless and until certain intransigent personalities in the Automobile Manufacturers Association and the SAE are replaced by progressive and forward-looking spirits of a more modern cast of mind, it is fatuous to look to the Society of Automotive Engineers for the cooperation with the insurance groups that is postulated by Mr. Kearney. To expect the SAE, as at present constituted, to police the industry of which it is the captive, when it refuses to cooperate with the requests of the national automobile insurance groups in such a simple thing as a seat belt standard, is to expect the impossible.

Must we then wait supinely, killing 38,000 people every year (40,200 in 1956) and permanently disabling 100,000 more, all largely because of faulty automobile design? Fortunately, we have another tradition and another precedent which we may follow, a vital and effective precedent which we must in haste invoke.

In the National Advisory Committee for Aeronautics we have a stable and vigorous example of what may be done for industry by an independent and competent government agency. The NACA has stimulated, guided, and led the aviation industry of this

nation to its present position of world pre-eminence, a position it could never have obtained without the independent and untrammelled thinking which such a committee, with its independent and extensive laboratories, has been able to foster. The NACA came into being because the aviation industry could not produce, or at least had not produced, the equipment we needed to face the world of 1914.

In stark reality, our motorcar situation today is just as alarming, and a solution just as peremptory. In any one year during the Korean War, the motorcar at home killed and injured more people than we lost in the entire three years in Korea! The motorcar in the last fifty years has killed 100,000 more people than we have lost in all our wars together! And this is largely because of faulty automobile design, which the medical profession has been urging the industry to correct for the last twenty years. This is *not* overdrawn. Note the following news release by the Ford Motor Company dated February 22, 1957:

"Based on these findings," Mr. McNamara said, "John O. Moore, director of the Cornell project, recently estimated that if all of America's 50,000,000 automobiles suddenly were equipped with Ford's five safety features, half a million persons annually would escape injury and a major share of our current traffic fatalities would survive."

A plea to Congress

This is a call upon our Congress to bring into being a National Advisory Committee for Motorcar Development. We need desperately a body of men, physicists, sociologists, medical men, engineers—all independent of the industry—to guide, stimulate and lead the motorcar industry to provide us with vehicles for safe and efficient transportation.

And, we need more than this, more than an advisory committee. We need a regulatory body, something like the Civil Aeronautics Board and the Civil Aeronautics Administration, but with more power than either of these organizations have, to enforce and control the measures and devices that the Advisory Committee—and the industry itself—bring into being. Must the provision of safety measures depend on the whim of some sales

engineer, his hunch as to whether "it will sell"? Must 10,000 women and children die or be brutally mutilated every year because this Paragon of Sales Curves puts his thumb down?

We claim to be civilized, but until we take the provisions for motorcar safety upon which all of us are dependent, out of the hands of commercial interests and put them into the hands of disinterested scientists and engineers, I, for one, humbly disallow the allegation. Rome, with her vaunted civilization, never progressed beyond the stage which considered fire protection a matter for private enterprise. The commercial fire-fighter team would rush to a burning home, offer the owner a ruinous price for the property, and if he would not accede, stand by and let the house burn to the ground. Rival companies were finally merged into a city-wide monopoly.

With our long-standing tradition of volunteer fire-fighting organizations which have developed into our modern efficient fire-departments, this old Roman practice seems quaintly archaic. And yet, in the field of motorcar safety and design, and caught in the grip of mass production and increasing monopoly, we are in about the same grade of civilization.

Better roads needed

It has already been suggested that we have a National Advisory Committee for Highways. It is my suggestion that the field of motorcar development be defined by the Congress as including highway development, and that it be recognized and stipulated that highway development and motorcar development be closely integrated. It would seem obvious that they should be, and yet here we are, the self-styled engineering geniuses of the world, with 1958 cars able and willing to cruise all day at over 100 miles per hour, and not a road to cruise them on!

Will the new interstate system be a modern road, or will it be obsolete before a stone is laid?

Federal legislation needed

As a practical suggestion for the kind of action needed, the following proposal for a Bill is offered:

PROPOSED LEGISLATION FOR THE SOLUTION OF THE MOTORCAR DEATH AND INJURY PROBLEM

To reduce loss of life, personal injuries, and property damage resulting from automobile accidents by establishing a Bureau of Motor Vehicle Affairs in the Department of Commerce. This bureau, under an Assistant Secretary of Commerce for Motor Vehicle Affairs, shall have charge of Federal inspection of motor vehicles, and motor vehicle factories and the establishment and enforcement of minimum safety specifications of design and construction to which all vehicles manufactured in and imported into the confines of the United States and its possessions must conform.

Sec. 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That it is hereby declared to be the policy of the Government of the United States to play a more vigorous role in reducing the tragic loss of life, personal injury, and property damage which occur annually as a result of automobile accidents on our nation's highways.

Sec. 2. In order to carry out the policy established in the first section of this Act there is established within the Department of Commerce a Bureau for Motor Vehicle Affairs, under an Assistant Secretary of Commerce for Motor Vehicle Affairs (hereinafter referred to as the "Bureau" and "Secretary," respectively). The Secretary shall be appointed by the President, by and with the advice and consent of the Senate.

Sec. 3. The President shall also appoint, by and with the advice and consent of the Senate, a National Advisory Committee for Motorcar Development (hereinafter referred to as the "Advisory Committee") to consist of seventeen members, of whom no more than seven shall be members of the National Academy of Sciences. The Advisory Committee shall at all times have within its membership a physicist, a sociologist, a representative of the General Services Administration, not more than one representative of the motorcar industry, at least one representative of the aircraft manufacturing industry, four Doctors of Medicine (of whom one is a neurosurgeon), four engineers (apart from the representative of the motorcar industry) and such others as the President may feel may be contributory.

Sec. 4. The functions of the Bureau shall be to: (1) provide safe motor vehicle transportation for the citizens of this Commonwealth; (2) provide economical motor vehicle transportation for the citizens, since motor vehicle transportation for individuals has long since ceased to be a luxury item, and basic individual transportation of an efficient, economical nature is a fundamental need and right of the citizens of the modern Commonwealth; (3) integrate the development of the motorcar with the development of that factor without which it cannot operate efficiently, our public roads.

Sec. 5. It shall be the duty of the Secretary, pursuant to Sec. 4 (1) above, to require the motorcar manufacturers to incorporate in their products those designs and devices which the Advisory Committee by a majority vote of its entire membership shall recommend. These designs and devices shall appear and be maintained in all motorcars produced after not longer than twenty (20) months of the vote of the Advisory Committee. The Bureau shall maintain in every factory Federal inspectors to the number deemed necessary to enforce the provisions of this Act. Every motor vehicle shall bear the Bureau mark of approval, a non-corrodable metal plate, bearing the manufacturer's serial number durably attached (under the supervision of the Federal inspector) to the motorcar in a conspicuous place. If the Secretary at any time believes that a manufacturer is wilfully or negligently not conforming to the provisions of this Act, he may halt, by Federal injunction, the manufacturing processes of this manufacturer. A levy for the costs of the inspectors' salaries and inspection processes in each factory is to be made against the factory, and paid into the Treasury of the United States quarter-annually. It is provided that the members of the Advisory Committee, as such, shall serve without compensation, except that travel and accommodations of the first class shall be provided for all those members who are not Federal employees, in which case travel and accommodations shall be provided by the Service of which the committee member is an employee. The Advisory Committee shall meet regularly twice a year, with such special or emergency meetings as shall be deemed necessary by either the Chairman of the Advisory Committee (who is to be elected by the members annually) or the Secretary. An Executive Committee of the Advisory Committee shall be formed consisting of seven members charged with administration of the affairs of the Advisory Committee, and general supervision of all arrangements for research.

Sec. 6. The Congress recognizes (from the experience of the National Advisory Committee for Aeronautics, the Civil Aeronautics Administration, and the Civil Aeronautics Board) that independent research may be demanded by the necessities of the problem, not, perhaps, to the extent that has been required by the NACA, and CAA, but to the extent needed to carry out the purposes of this Act.

Sec. 7. Such appropriations as are necessary to carry out the provisions of this Act are hereby authorized.

Comments

It is almost incredible that motorcar deaths, in spite of campaigns and slogans, number around 40,000 every year. It indicates to me that the definitive cause has not been attacked. Most close students of the matter,

particularly the research group at Cornell University, are in agreement that these deaths and injuries are a function of motorcar design.

It is almost incredible, too, that car design has been so little changed over the years. Dr. Claire Straith of Detroit as early as 1934 pointed out the defects, and Dr. Fletcher Woodward of the University of Virginia in 1948 made definitive suggestions for improved safety design. The industry as a whole ignored these medical authorities and rejected their suggestions. As for the changes in design made in the last two years, they are a step in the right direction, but only a step.

Consider safety padding. This was proposed by De Haven in 1946. In 1956 (ten years later) it was offered by Ford as an optional feature. Why should safety padding be optional, if it is effective (and Ford's use of it indicates that it is effective)? It should be standard in all models, particularly those with the widest sale.

In this stage of our civilization is fire protection, or pure drinking water, or uncontaminated meat, an optional? This history and these dates indicate to me, at least, that the motorcar industry has been, and is, socially as irresponsible as was the meat-packing industry of fifty years ago. Despite the introduction of refrigeration methods as early as 1875, and despite years of public outcry and clamor, it was not until the Federal Food and Drug Act of 1906 and the Meat Inspection Act of the same year, that we were able to have uncontaminated meat in this country. When the Federal inspectors moved in, in 1906, the appalling failure of

the meat-packing industry was revealed. Tons of diseased and contaminated meat which was formerly sold to the American public were now consigned to the rendering works.

There has been no indication that we can or should relinquish the Federal inspection of meat and meat-packing plants. The indelible stamp of the disinterested Federal inspector has been and will continue to be our guarantee of decent meat. The stamp of the Civil Aeronautics Administration on every aeroplane is our only guarantee that these vehicles meet minimum (and I emphasize minimum) standards of safety.

It is high time that the motorcar manufacturers be subjected to even more rigorous inspection and control. Our continuing and increasing deaths and injuries prove their guilt and our folly in waiting so long. Do not think that I expect them to accept these suggestions with a smile. There have been indications in recent years that the motorcar "tail," like the railroads of other years, has sought to "wag" the body politic. If legislation of this degree ever reaches the floors of Congress, we may expect the tramp of many feet in the corridors.

Summary

We are well along in our second million of motorcar dead. The Congress is the ultimate expression of public opinion. We have had years of clamor and outcry, and still we cannot get automobiles designed for safety. The Congress must integrate and implement the many people who know that highway safety is a matter of motorcar design, and who have the knowledge and the desire to bring it into being. •

N.B. As this paper goes to press, the Ford Motor Company again has demonstrated its good faith by announcing its safety engineer's "dream car" (TRAFFIC SAFETY, August 1958). Many of the safety improvements needed are embodied in this vehicle, including energy absorbing bumpers. A most significant development is the abolition of the instrument panel on the right two-thirds of the car, and the rigid fixation to the floor of the right two-thirds of the front seat. Thus the front

seat passengers, held by the improved retractable seat belts, can strike nothing as they swing forward across their belts in a crash. The glove compartment is placed under the front seat.

Unfortunately, this announcement concerns only a "dream" car, not a production model, and the carnage must go on for years. There is not the slightest indication of any development like this in the industry as a whole. Motorcar safety waits upon definitive legislation by the Congress.

Nursing education changes to meet service needs of patient care

Roy R. Prangley and Lillian DeYoung, Denver*

We need more nurses in the Rocky Mountain area, but the high quality of nursing education must not falter. Greater understanding of its broad educational implications will inspire more worthy young women to enter this rewarding career.

THROUGHOUT YEARS OF MEDICINE the field of nursing has played an important part in assisting the physician in getting the patient well. As advances in medicine are made, so are they in nursing education. In the beginning, nursing education started as a short-term course in which a few manual skills were given to individuals interested in nursing the sick. These manual skills included bed baths, rubbing the back, and making the bed. Other duties included the housewife's duties, such as cleaning the room, cooking and feeding the patient. Actually, nursing started from the mother care of the ill in the home. However, as we began segregating our ill from the home and bringing them into central institutions, there was need for organized kinds of skills to be performed, and they needed to be taught to persons other than the mother.

Early nursing

Florence Nightingale was reputed to have set up the first school of nursing, in which she had specific duties for the individual to

perform. As schools of nursing spread from European countries to the United States, changes in this field occurred. There was a need for education, classroom theory, practice and demonstration, but there was also a need for the return demonstration and practice in the clinical area. Hospitals first had schools of nursing as a way of supplying nursing service needs. In the early days of nursing, nursing care was all done by students of the school of nursing. There might have been one head nurse or one supervisory person. As students progressed, their responsibilities increased, and at the time of their graduation they were head nurses and supervisors.

In 1916 the organized nursing leaders submitted a curriculum guide to set forth educational standards in schools of nursing. The programs have varied in length throughout the years—anywhere from one year up to five years, as some of the schools of nursing are presently doing.

It was about 1936-1937 that the National League for Nursing Education put out its third curriculum guide, which all diploma programs felt necessary to follow if nursing was to become a profession and if students of nursing were to get an education on a more planned basis. Even though this curriculum guide was presented in 1937, many schools of nursing were unable to abide by the suggestions made. This curriculum guide was far reaching and had great impetus in schools of nursing for the next 20 years. It is no longer looked upon as the "Bible" of schools of nursing, in that schools of nursing are asking for greater experimentation and greater leniency in the number of hours required in the various subjects. However, it

*Mr. Prangley is the Administrator, and Miss DeYoung the Director, of the School of Nursing at St. Luke's Hospital, Denver.

did serve as a guide for nursing educators to work on in terms of improving nursing education on a professional level.

St. Luke's School of Nursing has looked upon all forms of nursing education as a means of bettering its school. It has progressed with time. It has improved its curriculum to give the student the kind of knowledge and skills that will make her a person to be trusted in the care of the ill. As you are all aware, today there are various kinds of nursing education programs. We have our practical nurse programs, which are one year in length, combined with class work and clinical teaching. Our practical nurses are individuals prepared to function under the supervision of the registered nurse. In the past 10 years these people have been valuable in helping give patient care and relieving the nursing personnel shortage.

Nursing shortage

In speaking of shortage of nursing personnel, there are many reasons for this. One of these is the increased demand for professional help. Nurses are no longer found exclusively in the hospital. They are found in various fields. Industrial nursing has grown by leaps and bounds. Nurses are found in department stores, in doctors' offices, public health nursing, school nursing, the military services, and on and on; in miscellaneous kinds of areas we find a demand for nurses. Also, we must recognize that the nursing profession is mainly made up of women. Most of these are young women at the marriageable age. The average nurse will work approximately five years until marriage and family take over. This again cuts down the number of active nurses. We are actually graduating many more nurses today than we ever have, but the demand is much greater.

The demands in hospital nursing have increased mainly because the student of nursing is no longer carrying the total load of nursing service. In 1930 there were no staff nurses employed, and it was the students who were caring for the patients around the clock. We do not say that students in this era did not receive valuable training, because many of those persons are still with us today and are excellent nurses. However, as stated above, as medical science improved so did

nursing science. This has been necessary in order to keep up with the demands of medicine. The procedures that were once doctors' procedures are now nursing procedures. The procedures that are being done are much more technical than those of a few years ago.

We now have three kinds of professional nurse programs for the basic student of nursing — two-year nursing, three-year nursing and four-year nursing. The two-year nursing is a new program, which is called the associate degree program associated with junior colleges. This is approximately six years old, and there have been only a few pilot schools that have given us a new concept of nursing education. The student matriculates as a regular college student. She has her major in nursing. She fills all the requirements that any other college student will, plus those that are required for nursing. She receives nursing theory as well as clinical practice. The question has arisen, how can a student be given a nursing education in two years when it has taken three or four years in the past? It is the newer approach to theory and clinical instruction that has made this possible. In theory there are broad groupings of subject matter with little repetition. In clinical practice the student is on the clinical service for only a specific laboratory situation. The repetition has been taken out, but the material is there. This student has proved theory-wise that she can do, and has an understanding of, total patient care and medical science. Clinically she is not an experienced individual and must have postgraduate clinical training. However, she does have the manual skills with which to work and improve her abilities. We are looking upon this graduate as the one who will be the bedside nurse—the one who will remain in caring for the patient and generally will not advance into leadership positions. There are those of us who believe that a two-year educated nurse is not ready to assume full responsibility as a professional nurse until she has completed an accredited nursing internship. The three-year nursing programs are still those that are associated with hospitals and are commonly known as the diploma program. Many of these are still the traditional program, but some of them are progressing in modern educational methods

and teaching. We believe that St. Luke's has a top diploma program.

Collegiate program

The collegiate program which is of higher education in the universities has grown in the past 15 years. Their theory is that for a nurse to be a professional person she must have completed a Bachelor of Science degree, in which she has had 50 per cent general education and 50 per cent professional education. Their program differs in that the student is matriculated as a complete college student; she is required to take the same requirements for graduation as other students, plus those that will be necessary to qualify her for nursing. The student has the same opportunities as other college students in social life and extra-curricular activities. This student has been said to be the person to possess leadership qualities in nursing, while the main objective is to prepare the student for first level positions in nursing. The student's clinical experience is set up like that of the two-year nursing program. The number of hours she spends in the laboratory session is calculated on the number of credit hours to be given for that particular session. This is a field that we can look upon, and look to, for helping schools of nursing improve their educational methods. It is necessary for students of nursing as well as other individuals to possess knowledges and skills other than nursing, so we might meet individual needs rather than treating the patient as a room number with a specific diagnosis.

Period of change

In 1955 St. Luke's School of Nursing had to evaluate itself to determine the kind of program it wanted. It had its full national accreditation as a diploma program. It was at this time we had been associated with the University of Denver on a 39-month core program. Students were receiving full college credit for all materials given, and yet looking at this from the standpoint of collegiate nursing education we were neither collegiate nor were we diploma. We were offering both, and it was necessary for us to determine just which one we wanted. The University of Denver, at that time, felt they did not want

to go into nursing education because it was costly and they did not have the finances with which to sponsor such a program. St. Luke's School of Nursing, Presbyterian School of Nursing, and Children's Hospital School of Nursing were all associated with the University of Denver under this program. When the University of Denver decided in 1954 they no longer wanted to be part of this, they gave us until 1956 to make the change. The University of Denver later decided to maintain a small program with Presbyterian Hospital as their clinical facilities. We took our last class of students for the University of Denver program in September, 1955.

During 1955 much investigation went on. Did we want to become a two-year nursing education program, a three-year program, or did we want to move into collegiate nursing? After much investigation of the kinds of universities and colleges in Denver, we found it best for us to remain a diploma program. To remain a diploma program, we wanted to be sure we would have the best educational program, but keep it within the hospital. We contracted with the University of Colorado Extension Service for our Basic Sciences, for which the students receive 7 credit hours for chemistry, 9 hours of anatomy and physiology, 5 hours of microbiology, 5 hours of sociology, 5 hours of psychology, 4.5 hours of English, giving them 35½ hours upon graduation if they desire to go on for a Bachelor of Science degree in nursing.

With the curriculum revision, the faculty of the School of Nursing began to look at the five basic areas that we necessarily have to teach, how these could be taught to give the most meaningful experience to our students, and maintain the kind of tradition that had been established for St. Luke's School of Nursing students. That is, that they become responsible graduates able to perform their duties with dignity, responsibility and trustworthiness. Our greatest changes have occurred then in broad grouping of theory classes. We are not attempting to limit the number of clinical hours the student needs to become a skilled individual. In fact, both students and faculty desire more clinical practice. We had been teaching small courses such as Professional Adjustments, I History

of Nursing, Nursing Arts—all with much subject matter that was alike. Therefore, we have revised this course, calling it Fundamentals of Nursing, which is started the day the student enters the School of Nursing and progresses until the day she graduates. The number of hours is limited to the didactic or classroom area the first nine months, due to the basic science division, which is necessary to build a foundation to help the student understand nursing and medical science of today.

Early clinical experience

We are attempting each year to increase the number of hours in teaching Fundamentals of Nursing so we can get the student into the clinical situation early. In 1955 our students were not on the floors until late in their second quarter. In 1956 we got them on the floors early in their second quarter, and now we are able to get them on the floors the last of their first quarter. We feel this is necessary to keep the interest of the students. Students have asked that they get into hospital activity quicker so their interest will not lag. We are doing this by increasing their knowledges and skills to prepare them for the kind of clinical experience that is necessary.

Our Fundamentals of Nursing, which used to be procedure-centered, has been integrated with our medical-surgical nursing classroom theory so when we are teaching about the digestive tract we will also include procedures of gastric analysis, et cetera, and the procedures will be more meaningful and the students will have a better understanding. This is the way nursing education has changed, so when the student practices in the clinical area she will have had the material in the classroom. She will then have a better understanding, and will not have the fears some of us had who went on the floors to learn more or less by trial and error.

Our students also are on a 40-hour week, which means as an example, if they have ten hours of classroom theory they will be in the clinical area 30 hours. For the first year and one-quarter our students are on the floors a little less than this because of classroom scheduling and the need for basic

sciences being given the first nine months. During the first year and three months the clinical practice increases from four to twenty hours for each student in the clinical area. We expect for every classroom hour of instruction that the student study two clock hours, which means if she is doing this she is working far more than a 40-hour week.

Correlation of learning

We expect, when students are on duty for clinical practice, to govern the kind of assignments they have by giving the students the kind of patient they have studied in the classroom. However, in the event the student completes her assignment, we encourage each of them to participate in the total needs of the landing. By the fact that the student is in the nursing service area, even though she has only one patient to care for, she has the responsibility of nursing service for that specific patient and to that extent relieves the regular nursing service team. The student is encouraged to answer lights, to meet all patients' needs—not just a selected few patients' needs. The clinical instructor teaches students theory in the formal classroom and follows through in the clinical area, thus relieving nursing service from this responsibility.

Our students receive limited 3:00 to 11:00 and 11:00 to 7:00 experience during both junior and senior years. This is under the supervision of either a clinical instructor or a nursing service supervisor and the head nurses on this landing. We have specific objectives set up for the students to achieve. Our method of teaching is from the simple to the complex. As the student advances in tenure she advances in responsibilities. It is our belief that the student must assume more responsibilities if she is going to function effectively as a graduate. Because of this belief, we have set up a senior program in which we have the student work in various areas on an advanced level, giving her charge nurse experience—not that we expect her to be the charge nurse at the day of graduation, but so she will have a better understanding of total landing administration and can assume this responsibility if the need arises. It also gives us opportunity to determine whether she has potential abilities.

Our students receive education—not only in the medical-surgical area, but in obstetrics, operating room, pediatrics and psychiatry. Students are not allowed to go to the pediatric area until they have completed the first 18 months. Following pediatrics at Children's Hospital, Denver, they go into the psychiatric area at the State Hospital in Pueblo. Thus, as the students progress they are in the specialties either in the late junior or early senior year. We have spread out the classroom theory so the student can be provided with education throughout her three years. We keep the last three months of her three years open, with as little formal classroom scheduling as possible, in hope she can gain added experience in the clinical situation. St. Luke's School of Nursing, as a diplo-

ma program, is probably one of the most progressive in the country. It has combined the newer methods and principles of education along with the need for clinical experience. We in no way want to jeopardize the student in being an effective graduate nurse. We want her to have the ability to meet every patient's total need, as well as meeting the physician's need in helping each patient. The educational basis is sound and we have received the utmost cooperation from nursing service and hospital administration.

We solicit cooperation of the medical profession in this area in understanding that we want to prepare professional nurses you will be proud to have caring for your patients—efficient, loyal, dependable and cooperative individuals. •

Cystic disease of the lung

Stanley W. Henson, Jr., M.D., A. N. Grosboll, M.D., and Stuart Patterson, M.D.,
Fort Collins, Colorado

*Surgery produces dramatic results
when cysts are symptomatic.*

*Symptoms occur from infections,
pneumothorax, or compression
of adjacent tissue.*

CYSTIC MALFORMATIONS OF THE LUNG may be single or multiple, localized or diffuse, congenital or acquired. They frequently involve only one lobe and may or may not cause symptoms. When symptoms do occur they result from infection of the cyst or adjacent tissue, rupture of a subpleural cyst causing pneumothorax or from compression of normal lung tissue causing pulmonary insufficiency. The diagnosis is readily made by roentgenograms and the treatment in most cases is surgical excision.

Despite increased knowledge concerning the pathologic and clinical manifestations of

this disease, the benefit from surgical excision is not universally appreciated.

CASE REPORT

A 36-year-old white male who worked as a cement finisher was seen in April, 1957, complaining of pain in the right chest, shortness of breath and some difficulty in swallowing for the previous five months. His past history revealed the usual childhood diseases plus typhoid at the age of 11. In 1941 and again in 1943 a "small cyst of the lung" had been noted on routine chest films.

Examination revealed the right chest to be tympanitic with breath sounds diminished over the right upper lobe and entirely absent over the right middle and right lower lobes. Heart sounds were distant and the apex was thought to be in the left anterior axillary line. Physical examination was otherwise normal. Routine urinalysis and complete blood count were within normal limits.

Roentgenograms of the chest revealed diminished pulmonary markings in the right lung. The mediastinum was displaced toward the left. This was interpreted as being due to a large pulmonary cyst probably involving the right lower lobe.

At operation the entire right lung appeared to be cystic, but to varying degrees. The anterior



Fig. 1. Pre-operative roentgenogram showing decreased pulmonary markings in the right lung and herniation of the mediastinum into the left chest.



Fig. 2. Lateral view showing cysts that protruded in front of and behind the heart into the left chest.

segment of the right lower lobe and the medial segment of the right middle lobe contained multiple large cysts which herniated across the midline in front of and behind the heart. The remain-

ing segments of the right lower lobe were completely atelectatic. These were easily expanded and appeared to be relatively normal. The upper lobe contained multiple small cysts but there was much functioning pulmonary tissue remaining.

The involved segments of the right lower lobe and a portion of the right middle lobe were resected. The lung was re-expanded and the chest closed. Two catheters were brought out through the chest wall for suction drainage.

The surgical specimen weighed 151 grams and consisted of two segments of lung tissue measuring $16 \times 20 \times 5$ cm. and $13 \times 8.5 \times 7.5$ cm. in the partially collapsed state. The cut section showed multiple alveolar cysts of varying sizes. Microscopically these were lined by alveolar epithelium.

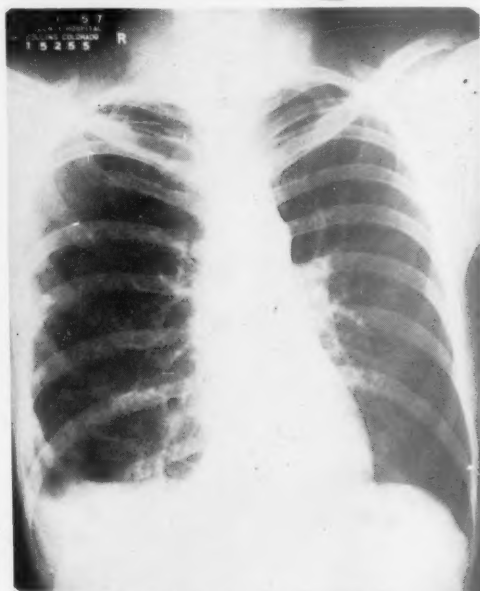


Fig. 3. Postoperative roentgenogram showing mediastinal structures in midline and pulmonary markings in both lungs.

Postoperatively the patient did well. The highest temperature elevation was 101.6 degrees rectally. The drainage tubes were removed on the sixth postoperative day, and he was dismissed on the thirteenth postoperative day. He has returned to his work as a cement finisher and has no respiratory symptoms, one year after surgery.

Discussion

A satisfactory classification of pulmonary cysts is not easily provided. True pulmonary cysts are those having an epithelial lining and may be classified in two main types—bronchogenic and alveolar. Cystic bronchiectasis sometimes considered a third type

continued on 56

ACHROMY
ACHROMY
ACHROMY
ACHROMY
ACHROMY
ACHROMY
ACHROMY



Tetracycline with Citric Acid **LEDERLE**

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York



may be differentiated by bronchograms.

Pseudocysts or false cysts are cavities having a fibrous lining and are usually associated with tuberculosis, fungus infections, bacterial abscesses or carcinoma.

Other cysts found in the lung but not peculiar to pulmonary tissue include dermoids, teratomas and echinococcal cysts.

Bronchogenic cysts

Bronchogenic cysts are thought to be congenital malformations. They are usually single, but may be multiple. Heller¹ has shown that many bronchogenic cysts thought to be solitary are associated with cystic disease of lesser extent in other areas of the lung. Gross² feels that finding a mucous secreting, ciliated, columnar epithelium lining a cyst positively identifies the cyst as being congenital in origin. Certainly cystic hamartomas and broncho-pulmonary sequestrations are evidence of congenital malformations.

Bronchogenic cysts are found within the lung usually near the hilum or within the mediastinum. They may or may not communicate with a bronchus. They are lined with a columnar epithelium which is frequently ciliated. The cysts are filled with fluid or air or both. The incidence of carcinoma in epithelial lined cysts is relatively high. Moersch and Clagett³ report malignant change in three of 44 bronchogenic cysts resected. Korol⁴ states that bronchogenic carcinoma almost never occurs before the age of 30 except with congenital cystic emphysema.

Because bronchogenic cysts show a marked tendency to become infected, and because the incidence of associated carcinoma is significant, treatment should be surgical excision whether they are producing symptoms or not. Resection of pulmonary cysts may be life saving in infants and many such resections have been reported during the first weeks of life^{5, 6, 7}.

Alveolar cysts

Alveolar cysts may be congenital or acquired. Many occur in infancy without history of prior infection which would favor a

congenital origin. Other cysts are known to follow pneumonia, particularly staphylococcal pneumonia in infants. These have been called post-infectious pneumatoceles. Blebs and bullae may be associated with diffuse emphysema involving both lungs.

Alveolar cysts may be single but are more commonly multiple. They are usually peripheral in location and frequently subpleural. They are lined by alveolar epithelium and are filled with air. Infection is not a frequent complication of alveolar cysts but rupture of subpleural blebs causing pneumothorax is common and may recur at distressingly frequent intervals. Bilateral pneumothorax may occur in a significant number of cases and threaten the life of the patient. When alveolar cysts are large or multiple they may displace sufficient pulmonary tissue to cause dyspnea and cyanosis.

Treatment of alveolar cysts is directed toward preventing recurrent or bilateral pneumothorax and the removal of a space occupying mass. When alveolar cysts are small and asymptomatic they may be followed expectantly. If they are large or producing symptoms they should be excised. In diffuse cystic disease such as the case presented, excision should be conservative and maximum functioning tissue should be preserved.

Summary

1. Cystic disease of the lung may be congenital or acquired, localized or diffuse and may involve one lobe or any combination of lobes.
2. True pulmonary cysts are of two main types—bronchogenic cysts lined with cuboidal or columnar epithelium and alveolar cysts lined with flattened epithelium.
3. When symptoms occur they result from infection within the cyst, rupture of the cyst causing pneumothorax, or compression of adjacent pulmonary tissue.
4. The diagnosis is usually made without difficulty from roentgenograms.
5. Because of the tendency to become infected, and because of the high incidence of associated carcinoma, the treatment of bronchogenic cysts is surgical excision whether symptoms are present or not.
6. Alveolar cysts should be excised if they

cause symptoms, if the danger of bilateral or recurrent pneumothorax is significant, or if the cyst is of such size that pulmonary function is decreased.

7. A case of diffuse cystic disease involving the right lung has been presented in which partial resection of the right middle and lower lobes resulted in improved cardio-respiratory function. •

REFERENCES

- ¹Heller, E. L.; Householder, J. H.; Benshoff, A. M.: Bronchogenic Cysts. A Manifestation of Congenital Polycystic Disease of the Lung. *Am. J. Clin. Path.*, Vol. 23, No. 2, pp. 121-128, Feb., 1953.
- ²Gross, R. E.: Congenital Cystic Lungs; Successful Pneumonec-tomy in a Three-Week Old Baby. *Ann. Surg.*, Vol. 123, No. 2, pp. 229-237, Feb., 1946.
- ³Moersch, H. J., and Clagett, O. T.: *J. Thoracic Surg.*, Vol. 16, p. 179, 1947.
- ⁴Korol, E.: The Correlation of Carcinoma and Congenital Cystic Emphysema of the Lungs. Report of Ten Cases. *Dis. of Chest*, Vol. 23, p. 403, 1953.
- ⁵Potts, Willis J., and Riker, William L.: Differentiation of Congenital Cysts of the Lung and Those Following Staphy-lococcus Pneumonia. *Arch. Surg.*, Vol. 61, p. 684-695, 1950.
- ⁶McEachern, C. G.; McCoy, R. R.; Arata, J. E.: Lobectomy for Congenital Cystic Disease of the Lung. Report of a Case in a Nine-Day-Old Infant. *Journal A.M.A.*, Vol. 151, No. 12, pp. 992-993, March 21, 1953.
- ⁷Swan, Henry, and Aragon, G. E.: Surgical Treatment of Pul-monary Cysts in Infancy. Report of Three Cases. *Pediatrics*, Vol. 14, No. 6, pp. 651-658, Dec. 1954.

Chemotherapy of specific infectious diseases of the lower respiratory tract*

Report of Committee on Chemotherapy and Antibiotics, American College of Chest Physicians.

THE MAJORITY OF PULMONARY INFECTIONS can be successfully treated by the judicious use of antibiotics and other chemotherapeutic agents. It is important to establish a diagnosis of the type of infection in all infectious diseases of the respiratory tract. Cultures should be made prior to therapy whenever feasible. Sensitivity tests of the organisms found in all prolonged infections are essential guides in the care of the patient. It is sometimes difficult to make an exact bacteriological diagnosis at the onset of a pulmonary infection, and treatment may have to be started at once. A simple Gram's stain of a fresh sputum specimen is important in determining the type of therapy while awaiting the

cultures. If the diagnosis is still obscure and the patient has a severe infection, therapy designed against both gram-positive and gram-negative organisms should be instituted. Obviously all other clinical guides will be useful, such as the manner of onset of the disease, the characteristics of the sputum, the white count, the cold agglutinins, etc. Treatment should be vigorous and should be continued until all signs of infection have cleared. This is important to prevent development of chronic disease of the lungs and bronchi.

Classification of pneumonias

- I. *Bacterial*
 - a. *Pneumococci*
 - b. *Streptococci*
 - c. *Staphylococci*
 - d. *Klebsiella pneumoniae*
 - e. *Hemophilus* infections
 1. *Pertussis*
 2. *H. influenzae*
 - f. *Pasteurella* infections
 1. *Pasteurella pestis*

*Reprinted from "Diseases of the Chest," Official Journal of the American College of Chest Physicians, Volume XXXIII, Number 4 (page 435), April, 1958. Dr. James A. Wier, Denver, is Chairman of the Committee on Chemotherapy and Anti-biotics.

2. *Pasteurella tularensis*
 - g. Coliform, proteus and pseudomonas (gram-negative bacilli present in the intestinal tract)
 - h. Salmonella group
 1. Typhoid
 2. Paratyphoid A.B.C.
 - i. Brucella
 - j. Anthrax
 - k. Glanders
- II. Viral (known and probable)
- a. Psittacosis
 - b. Influenza A & B
 - c. Variola
 - d. Varicella
 - e. Rubella
 - f. Lymphocytic choriomeningitis
 - g. Primary pneumonitis of infants
 - h. Infectious mononucleosis
 - i. Erythema exudativum multiforme
 - j. Primary atypical pneumonia
- III. Rickettsial
- a. Typhus
 - b. Rocky Mountain spotted fever
 - c. Q fever
- IV. Mycoses (producing a pneumonia like picture)
- a. Actinomycosis
 - b. Nocardiosis
 - c. Blastomycosis
 - d. Coccidioidomycosis
 - e. Histoplasmosis
 - f. Moniliasis
 - g. Cryptococcosis
 - h. Aspergillosis
 - i. Geotrichosis
 - j. Penicilliosis
 - k. Sporotrichosis

Treatment of pneumonias

I. Bacterial pneumonias

Pneumococcal pneumonia. Penicillin is the drug of choice in the treatment of pneumococcal pneumonia. It is best given by the intramuscular route, using 300,000 units of aqueous penicillin every three to four hours, or 600,000 units of procaine twice daily. Oral penicillin is not advised except in mild cases. Therapy is continued until the temperature has been normal for three days. Larger or smaller doses may be used depending on the

severity of the disease. The sulfonamides are highly effective in the treatment of pneumococcal pneumonia. The dosage is 6 to 8 gms. daily. The broad-spectrum antibiotics, including tetracycline, chloramphenicol and erythromycin are all effective, but should still be considered second to penicillin.

Streptococcal pneumonia. Treatment of streptococcal pneumonia is the same as that of pneumococcal pneumonia.

Staphylococcal pneumonia. Treatment of staphylococcal pneumonia requires considerable care in view of increasing development of staphylococcal resistance to most antibiotics. Sensitivity tests should be made early. If the organism is penicillin sensitive, large doses of penicillin, two to four million units daily should be given and no other antibiotic need be given with it except perhaps streptomycin. If the organism is penicillin resistant and susceptible to erythromycin or novobiocin then one or the other of these drugs should be used. Vancomycin, which is not yet on the market, is an excellent bactericidal agent for staphylococci and should be used if the organism is resistant to other more readily available drugs. In the seriously ill patient who is not responding to the prescribed therapy, bacitracin in doses of 25,000 units every six hours should be added. The nephrotoxic potentialities of bacitracin must be watched. Treatment of staphylococcal infections should be prolonged for three or four weeks.

Klebsiella pneumonia. Test of susceptibility should be performed but usually this type of pneumonia is best treated by streptomycin 2 to 4 gms. daily plus one of the tetracyclines in 4 gm. dosage initially. After response to therapy the dosage may be lowered. Sulfadiazine has also been quite effective in conjunction with streptomycin. Treatment must be continued for several weeks because of the severity and chronicity of the disease. The potential toxicity of streptomycin when used too long must be kept in mind.

Hemophilus infections. Chloramphenicol or tetracycline in doses of 2 to 4 gms. daily are effective in both pertussis and H. influenza infections. Sulfadiazine or streptomycin should be used in combination in the serious case.

Pasteurella infections. Sulfadiazine, streptomycin, chloramphenicol and tetracycline have all proved effective in the treatment of plague pneumonia. Streptomycin is the drug of choice. Streptomycin is the ideal agent in the treatment of tularemic pneumonia in dosage of 2 to 4 gms. daily. The broad-spectrum antibiotics are also effective.

Coliform, proteus and pseudomonas group. This group is becoming increasingly important as a result of antibiotic therapy. Sensitivity tests must be done to find the most effective drugs. The organisms may be sensitive to the broad-spectrum antibiotics, sulfadiazine and streptomycin. A tetracycline may be sufficient for the coliform and proteus types of pneumonia if the organism shows susceptibility to these agents but combinations of antibiotics are usually necessary. If these organisms are resistant combination of tetracycline and streptomycin in full dosage should be tried. If response does not occur penicillin, in large doses, in combination with chloramphenicol should be tried. In resistant infections polymyxin may be used with a tetracycline. Polymyxin is the drug of choice for pseudomonas pneumonia. The drug is both nephrotoxic and neurotoxic. It should be used with caution. In general, infections by this group respond poorly to all antibiotics.

Salmonella group. The typhoid bacillus is a rare cause of pneumonia. Chloramphenicol 2 to 4 gms. daily followed in a few days by 1 gm. dose is specific. In the other salmonella infections, chloramphenicol or one of the tetracyclines may be used.

Brucella infections. Brucella infections are best treated by a combination of tetracycline, $\frac{3}{4}$ gm. every six hours in combination with streptomycin 1 gm. daily for a month.

Anthrax. Pulmonary anthrax is a rare complication of anthrax but when present is a very serious and fulminating disease. The tetracyclines are the drugs of choice, though penicillin and the sulfadiazines have also been used successfully.

Glanders. Lung lesions occur in about one-quarter of the glanders cases. Sulfadiazine and streptomycin are effective in the treatment of glanders. The broad-spectrum

antibiotics have also been used successfully.

II. Viral pneumonias

Psittacosis. The tetracyclines are the drugs of choice using 4 gms. daily for the first two days, followed by a 2 gm. daily dosage. Penicillin has been used successfully.

Virus influenzal pneumonia. There is no known specific for influenzal pneumonia.

Variola. Pulmonary lesions often occur in smallpox. There is no specific for the primary disease but because of secondary infections by bacteria appropriate chemotherapy for these infections should be used.

Varicella. Pneumonia occurs rarely. Treatment should be directed to secondary bacterial infections.

Rubella. Bronchopneumonia is a common complication of measles. While there is no specific for the measles virus, superimposed bacterial infections are frequent and can be successfully treated by penicillin or the tetracyclines.

Lymphocytic choriomeningitis. Pneumonia occurs in lymphocytic choriomeningitis. Treatment is symptomatic.

Primary pneumonitis of infants. There is a serious disease in the newborn and premature infants probably due to a virus. There is no known specific therapy.

Infectious mononucleosis. Bronchopneumonia is a rare complication of infectious mononucleosis. There is no known specific for this disease.

Erythema exudativum multiforme (Stevens-Johnson syndrome). Pneumonia is a common accompaniment of this disease. It appears to be due to a virus which is not affected by any known antibiotic. Steroid therapy has often proved to be helpful.

Primary atypical pneumonia. The status of drug therapy of primary atypical pneumonia is still under question. Some observers feel that a tetracycline 0.5 gm. every six hours should be given until temperature has been normal for at least three days, principally to guard against secondary bacterial invaders. Some observers prefer to use no antibiotic therapy in the average case unless there is indication of a secondary infection.

III. Rickettsial pneumonias

Treatment of all of the rickettsial pneu-

monias may be combined together. Chloramphenicol or a tetracycline appears to be equally effective. The dosage in severe cases is 1 gm. every six hours for three doses, then 0.5 gm. every six hours until the temperature is normal.

IV. Mycotic infections

Actinomycosis. Penicillin is the drug of choice, one or two or more million units a day usually along with surgical drainage if necessary. One of tetracyclines may be just as effective. Treatment is continued for at least six weeks and should be kept up long after the lesions have disappeared to prevent a recurrence.

Nocardiasis. Sulfadiazine is the drug of choice for nocardia infections. The broad-spectrum antibiotics may be helpful. The treatment must be prolonged.

Histoplasmosis. At present there is no proven therapeutic agent for this disease, but very suggestive results are being obtained with a new antibiotic, amphotericin B. The drug has been employed in a number of cases and the incidence of serious toxic manifestations has been relatively low. It has also demonstrated definite therapeutic effect. The drug is very difficult to administer and must be given intravenously in a slow drip over a period of six hours. Approximately 1 mgm. per kilo per day is the usual daily dose and treatment is continued from thirty to sixty days. Under special circumstances the daily dose may be increased to as much as 100 mgm. per day. An oral form of the drug is available, but has not proved to be effective. Immediate febrile complications during therapy are not unusual especially if the drug is given too fast. These effects may be ameliorated by aspirin. These reactions have not interfered with the continued use of the drug.

Blastomycosis. 2-hydroxystilbamidine is the most effective agent in the treatment of blastomycosis. Standard daily dose is approximately 250 mgm. dissolved in 250 to 500 cc. of 5 per cent dextrose, and given intravenously. This is given rather slowly over a period of several hours at least. The drug should be used immediately after prepara-

tion and the solution should be protected from sunlight. Thirty to sixty days of daily dosage of 250 mgs. is recommended. The drug may be repeated in case of a relapse. Facial neuropathy may occur but is much less frequent than with stilbamidine. Recently amphotericin B has appeared quite effective in treatment of blastomycosis.

Coccidioidomycosis. Amphotericin B may be used for treatment of coccidioidal disease.

Moniliasis. Mycostatin is an effective antifungal drug for intestinal moniliasis, or it can be used locally. It has no effect on the systemic disease as it is not absorbed from the intestinal tract. In systemic moniliasis it is suggested that one of the newer antibiotics be employed, such as amphotericin B.

Cryptococcosis. Amphotericin B may be used. Its effectiveness is still under investigation.

Aspergillosis, geotrichosis and penicilliosis. These diseases are refractory to all known antibiotics. Amphotericin B should be tried.

Sporotrichosis. This usually responds satisfactorily to potassium iodide. 2-hydroxystilbamidine should be tried in the refractory case.

Steroid therapy

The role of steroids in the therapy of infectious disease is a subject of tremendous controversy. When overwhelming infections cause adrenal insufficiency steroid therapy is indicated. The beneficial anti-inflammatory and "antitoxic" effect of the steroids is opposed by the adverse influence of the steroids on tissue localization of infection. However it is likely that one may accomplish the desirable and prevent the potential harmful effects of steroids by the simultaneous use of anti-microbial agents to which the infective agent is susceptible. On theoretical grounds at least it would be undesirable to use steroid therapy in infections caused by organisms resistant to anti-microbial agents. There appears to be a place for the use of steroids in overwhelming infections not responding to conventional therapy. •

In
smooth
muscle
spasm...



- controls
stress
- relieves
distress

Pro-Banthine® with Dartal®

Pro-Banthine—
unexcelled for relief of cholinergic spasm—
has been combined with

Dartal—
new, well-tolerated agent for stabilizing emotions—
to provide you with

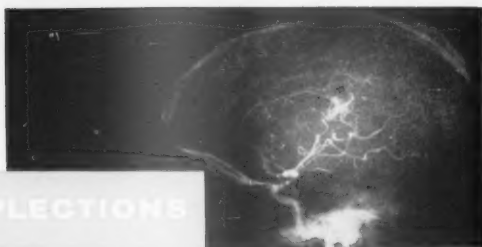
Pro-Banthine with Dartal—
for more specific control of functional gastrointestinal
disorders, especially those aggravated by emotional
tension.

Specific Clinical Applications: Functional gastroin-
testinal disturbances, pylorospasm, peptic ulcer, gas-
tritis, spastic colon (irritable bowel), biliary dyskinesia.

Dosage: One tablet three times a day.

Availability: Aqua-colored tablets containing 15 mg.
of Pro-Banthine (brand of propantheline bromide)
and 5 mg. of Dartal (brand of thiopropazate dihydro-
chloride). G. D. Searle & Co., Chicago 80, Illinois,
Research in the Service of Medicine.

SEARLE



Shadow or substance

Marcus J. Smith, M.D., Santa Fe, New Mexico

Apothegm

"In the host of patients who come to us with a pain in the back, we are able to demonstrate significant changes in only 10 per cent" (Sosman).

Clinical data

A 38-year-old man complained of pain in his low back and left leg of six weeks' duration; he related the onset to lifting some heavy barrels at his service station. There was some weight loss. The physical examination showed a well developed, well nourished man in moderate distress. Lumbar muscle spasm was present and the trunk moved to the left, favoring the left leg. A diminished left ankle jerk was noted and there were decreased sensations over the left lateral calf area; straight leg raising was limited on the left; there was a positive Lasague's sign.

X-ray studies

The routine spine films were normal. A myelogram demonstrated flattening of the left border (Fig. 1) of the pantopaque column at the level of the fourth-fifth lumbar interspace; in another view, the pantopaque stream appeared dorsally displaced.

an organic lesion at the L-4-5 level, possibly a ruptured disc or a tumor.

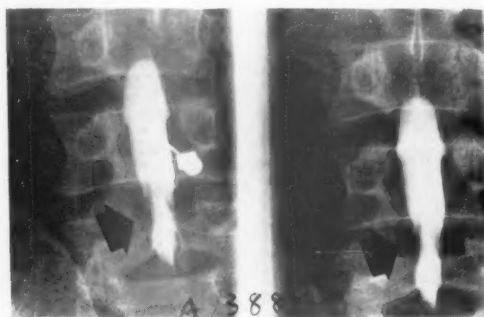
Clinical course

The patient was to return in several weeks for an exploratory laminectomy. He returned in one month with jaundice, epigastric pain, vomiting and abdominal distention. Severe constipation was present; the weight loss now exceeded thirty pounds. There was almost complete obstruction of the distal end of the stomach on the barium study. Exploratory laparotomy showed a large mass originating behind the stomach and involving the gastric antrum and pylorus; there were metastases to the lesser and greater omentum, the intestines, the peritoneum, liver and pelvis. Bile stained fluid was present. A biopsy was obtained, and the final diagnosis was "carcinoma of the pancreas with extensive metastatic spread."

Epicrisis

This is the second case of carcinoma of the pancreas that we have seen presenting clinically as a low back pain problem. Undoubtedly the myelographic deformity seen above constituted an extradural metastatic deposit.

Figure 1





in every
arthritic state...

maintenance therapy is still fundamental treatment^{1,2,3.}

Sound, conservative therapy with salicylates has been consistently reaffirmed as basic, long-term maintenance therapy in the arthritides.

Buffered Pabirin provides superior maintenance therapy. It epitomizes fundamental long-term basic therapy since it can be given month after month without serious complications and with minimal problems to patient and doctor alike.

Buffered Pabirin is formulated to provide high and sustained salicylate blood levels. Each tablet consists of an outer layer containing a buffer (aluminum hydroxide), para-aminobenzoic acid, and ascorbic acid; a core of acetylsalicylic acid.

In the stomach, the outer layer quickly releases the buffer, which protects against nausea, dyspepsia and other gastrointestinal symptoms so frequently encountered with salicylates alone. The core of Buffered Pabirin then disintegrates rapidly, permitting rapid absorption of the acetylsalicylic acid for faster pain relief.

References: 1. Hart, D.; Bagnall, A. W.; Bunin, J. J., and Polley, F. H.: Ninth International Congress on Rheumatic Diseases, Toronto, Ont. (June 25) 1957. 2. Report of Joint Committee, Medical Research Council & Nuffield Foundation, Treatment of Rheumatoid Arthritis, British Medical Journal (April 13) 1957. 3. Friend, D. G.: New England J. Med. 257:278 (Aug.) 1957.

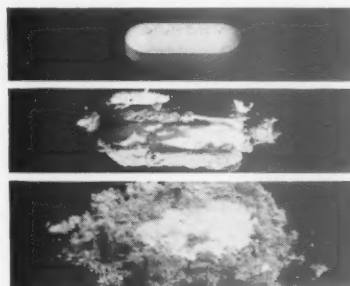
Buffered **Pabirin®** *Tablets*

Each tablet contains:

Acetylsalicylic acid (5 gr.).....	300 mg.
Para-aminobenzoic acid (5 gr.).....	300 mg.
Ascorbic acid.....	50 mg.
Dried aluminum hydroxide gel.....	100 mg.

All Buffered Pabirin is sodium- and potassium-free.

Dosage: Two or three tablets 3 or 4 times daily.



*Photographs show 2-stage
Tandem Release disintegration.*

SMITH-DORSEY • a division of The Wander Company • Lincoln, Nebraska • Peterborough, Canada



THE WASHINGTON SCENE

A monthly news summary from the nation's capital by the Washington Office of the A.M.A.

It is now well-recognized that the new 86th Congress, heavily spiced with newly-elected Democratic liberals, will set out to make an impressive record for itself. Health legislation will not be neglected.

On the basis of developments last session, and the known interests of many of the new members of Senate and House, here are the health areas where intensive activity is assured, with prospects for enactment of a number of bills either this year or next year, the final session of the 86th and also a Presidential election year:

Social Security. Labor has announced that it will work this year for substantial changes in Social Security, the most important being a program for hospital-nursing home care for the aged and other beneficiaries. On this the unions are supported by the Democratic Advisory Council, which reflects the views of the Truman-Steven-

son-Butler element of the party but generally finds itself to the left of Senate Leader Johnson, House Speaker Rayburn and some other Congressional leaders.

Under Social Security, the AFL-CIO and the Democratic Council also would lower or drop the age 50 requirement for disability payments, increase the OASI taxes, bring more income under the taxes, and raise benefits.

American Medical Association, joined by scores of other associations and individuals in health and other activities, successfully opposed the Social Security hospitalization plan last session. They are prepared to wage just as determined a fight this year.

Aid to Medical Schools. An effort was made in Congress last session to provide grants to medical schools for building and equipping teaching facilities, to complement the research grants program already in effect. While the administration supported the attempt, it did not throw behind it all the energy it is expected to exert this year. Top officials of the Department of Health, Education, and Welfare, from Secretary Flemming on down, have been talking up aid to medical schools all fall. When time comes to testify, they will be strengthened by the activities of a new committee appointed to look into the schools' problems, as well as by the Bayne-Jones report which calls for the immediate start on con-





*For Quality without Question... Enjoy the
unique refreshment of sparkling Coca-Cola*



SIGN OF GOOD TASTE

in a form  to fit

every  antibiotic 

need  ...

ACHROMYCIN*

ACHROMYCIN Tetracycline

ACHROMYCIN V Tetracycline with Citric Acid Lederle

the most 

widely used

useful...

antibiotic

and 

ACHROMYCIN V: Capsules • Pediatric Drops • Syrup

ACHROMYCIN: Capsules • Ear Solution 0.5% • Intramuscular • Intravenous • Nasal Suspension with Hydrocortisone and Phenylphrine
Ointment 3% • Ointment 3% with Hydrocortisone 2% • Ophthalmic Oil Suspension 1% • Ophthalmic Ointment 1% • Ophthalmic Ointment
1% with Hydrocortisone 1.5% • Ophthalmic Powder (Sterilized) • Oral Suspension • Pediatric Drops • PHARYNGETS® TROCHES
Soluble Tablets • SPERSOIDS® Dispersible Powder • Surgical Powder (Sterilized) • Syrup • Tablets • Topical Spray • Troches

*Reg. U. S. Pat. Off.

LEDERLE LABORATORIES, a Division of **AMERICAN CYANAMID COMPANY**, Pearl River, New York



struction of between 14 and 20 medical schools.

American Medical Association supports construction and equipment grants for medical teaching facilities. Strongest opposition this year is likely to come from some influential members of Congress, who succeeded in bottling up the legislation last session.

The Keogh bill. Last session this legislation to permit the self-employed to pay taxes on money withdrawn from retirement funds passed the House but failed to get out of committee in the Senate. Its sponsors, including the A.M.A., are hopeful that the Senate objections can be removed this year.

Medicare. Congressmen already have received protests from back home about restrictions imposed on the civilian phase of Medicare, mostly the channeling of service families to military facilities. This issue is sure to come up when appropriations hearings start on the Defense Department's budget. It may come up sooner, if Medicare runs out of money and requires a deficiency appropriation.

The Doctor Draft. The special draft, which has not actually been used in two years, may be invoked by the Defense Department this spring if there isn't a better response on the part of interns and residents to the appeals for volunteers. Should the law have to be used this year, the Defense Department will have a pretty convinc-

ing argument that it should be extended beyond its scheduled expiration date of next June 30.

Medical Research. While the Federal government currently is spending at a rate of more than \$324 million on medical research through the National Institutes of Health, a still higher record of appropriations is in prospect for next year. The Senate Appropriations Committee has announced that never again will the pace of research be slowed through lack of dollars. This is also the attitude of the AFL-CIO and the Democratic Advisory Council, among other groups. The pattern usually is for the House to increase moderately Budget Bureau figures for medical research, then for the Senate to vote large additional increases. The House then generally agrees to spend close to what the Senate wants.

Contributory Health Insurance for Federal Workers. A new effort to bring about a contributory health insurance program for civilian federal workers is expected, with federal employee unions leading the drive.

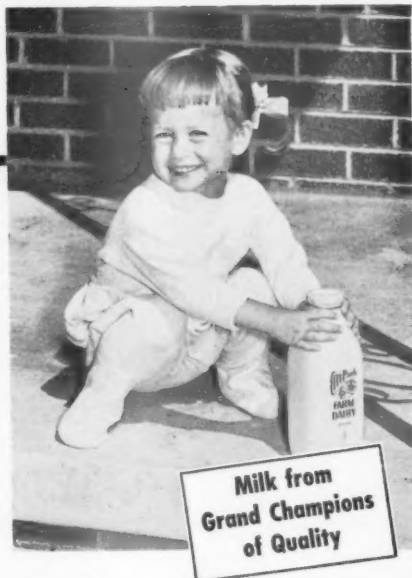
Other Prospects. A number of amendments will be proposed for the Hill-Burton act. Some effort will be made to strengthen the law under which labor-management health and welfare funds must keep records and file reports. Hospitals are looking forward to low-cost loans under a community facilities bill and nursing homes to mortgage guarantees

Condition... **PERFECT!**

...that's the only condition under which City Park-Brookridge milk is produced. For over 70 years we have maintained and utilized the most modern technique and equipment. In fact, many doctors have personally inspected and approved our plant and facilities. At City Park-Brookridge Farms, nature's "most perfect food" is produced under *only* the most perfect conditions. When you recommend milk from City Park-Brookridge farms you are assured of premium quality at its best.

City Park-Brookridge Farms

Office and Plant, 5512 Leedsdale Drive • Farm, Brighton, Colorado



more potent and comprehensive treatment than salicylate alone

... assured anti-inflammatory effect of low-dosage corticosteroid¹ ... additive antirheumatic action of corticosteroid plus salicylate²⁻³ brings rapid pain relief; aids restoration of function ... wide range of application including the entire fibrositis syndrome as well as early or mild rheumatoid arthritis

more conservative and manageable than full-dosage corticosteroid therapy—

... much less likelihood of treatment-interrupting side effects¹⁻⁶ ... reduces possibility of residual injury ... simple, flexible dosage schedule

THERAPY SHOULD BE INDIVIDUALIZED

acute conditions: Two or three tablets four times daily. After desired response is obtained, gradually reduce daily dosage and then discontinue.

subacute or chronic conditions: Initially as above. When satisfactory control is obtained, gradually reduce the daily dosage to minimum effective maintenance level. For best results administer after meals and at bedtime.

precautions: Because SIGMAGEN contains prednisone, the same precautions and contraindications observed with this steroid apply also to the use of SIGMAGEN.



in
any
case
it calls for

Sigmagen®
corticoid-salicylate compound tablets

Composition

METICORTEN® (prednisone)	0.75 mg.
Acetylsalicylic acid	325 mg.
Aluminum hydroxide	75 mg.
Ascorbic acid	20 mg.

Packaging: SIGMAGEN Tablets, bottles of 100 and 1000.

References: 1. Spies, T. D., et al.: J.A.M.A. 159:645, 1955. 2. Spies, T. D., et al.: Postgrad. Med. 17:1, 1955. 3. Gelli, G., and Della Santa, L.: Minerva Pediat. 7:1456, 1955. 4. Guerra, F.: Fed. Proc. 12:326, 1953. 5. Busse, E. A.: Clin. Med. 2:1105, 1955. 6. Sticker, R. B.: Panel Discussion, Ohio State M. J. 52:1037, 1956.

Schering

ORGANIZATION



MONTANA

Obituaries

EDWARD M. GANS

Dr. Edward M. Gans, 82, a Minnesota native who was named the outstanding family doctor in the United States in 1956, died Sunday, November 30, 1958.

The tall, rugged physician had practiced in the ranching town of Harlowton, Montana, since 1929. He spent the early days of his 53-year medical career on the Minnesota Iron Range.

Almost two years ago to the day—November 27, 1956—the A.M.A., meeting in Seattle, Washington, awarded Dr. Gans the gold medal of the general practitioner of the year.

The same year he was named the nation's outstanding Catholic doctor.

One of his three surviving children, Mrs. Donald E. O'Connor, St. Paul, quoted her father as saying in 1956: "I retire each night. That's often enough."

Both his sons are physicians. One, Edward, practices in Oakland, California. The other, Paul, practices in Lewistown, Montana.

Born in St. Cloud, Minnesota, Dr. Gans graduated from St. Cloud Teachers College. He taught school three years at Clearwater, Minnesota, before entering University of Minnesota Medical School. He received his medical degree in 1905.

He interned three months at Duluth, Minnesota, and started practicing in the mining town of Eveleth, Minnesota. He stayed there six years.

From Eveleth Dr. Gans moved to Dickinson, North Dakota, and a year later to Judith Gap, Montana, 20 miles north of Harlowtown.

He served as a captain with the Medical Corps overseas during World War I.

T. R. VYE

Theodore Roland Vye, M.D., Billings, died suddenly at his home Sunday morning, November 30. Dr. Vye was born in Elliston, Montana, April 29, 1902. He received his Bachelor of Science degree from Walla Walla College in 1923 and his degree of Doctor of Medicine from the College of Medical Evangelists in 1928. Following graduation he practiced medicine in Missoula for a short period. In 1933 he moved to Laurel for the general practice of medicine and in 1947 established his practice in Billings.

Dr. Vye had served as Secretary-Treasurer of the Montana Medical Association since 1953 and previously served on numerous committees of the Association. He was a Fellow of the American College of Surgeons and the International College of Surgeons; a member of the Yellowstone Valley Medical Society, this Association and the American Medical Association. Dr. Vye was dedicated to the service of his patients and to his medical organizations. During his five-year term as Secretary-Treasurer of this Association, he conscientiously devoted much time and effort to his duties. His advice and counsel were always sound and his guidance will be a profound loss.

D. D. PARKE

Delmar Davis Parke, M.D., Bozeman, Montana, died suddenly last month at the Bozeman Deaconess Hospital. Dr. Parke was born in Muncie,

continued on 76

THE CHILDREN'S HOSPITAL ASSOCIATION OF DENVER

NON-SECTARIAN—NON-PROFIT

*OCA CUSHMAN wing newly opened
with improved facilities to
serve your patients*

*Providing medicinal and surgical aid
to sick and crippled children of
the Rocky Mountain Region*

APPROVED BY THE JOINT COMMISSION ON ACCREDITATION OF HOSPITALS

*even when the causative organism
may be a "persistent staph"*

Cosa-Signemycin*

GLUCOSAMINE-POTENTIATED TETRACYCLINE WITH TRIACETYLOLEANDOMYCIN

*increases the certainty of
safe, rapid response*

AS PROVED BY extensive clinical trials—an over-all success rate of more than 94% was achieved in a total of 3,280 cases.†

AS PROVED BY success in mixed infections—more than 95% of 1,000 acute and chronic respiratory tract infections were successfully treated; a 99% cure rate was achieved in mixed bacterial pneumonias.†

AS PROVED BY effectiveness in "problem infections"—a response rate better than 96% was recorded in a group of 221 gastrointestinal infections including chronic intestinal amebiasis; 91% of 465 urogenital infections were successfully controlled.†

AS PROVED BY excellent safety record—extremely well tolerated; discontinuance of medication was necessary in only 11 of 3,280 patients.†

*A significant number of the above cases had not responded
to other antibiotics.*

*Cosa-Signemycin is particularly valuable in home and office,
where susceptibility testing is difficult or impractical.*

SUPPLY: Capsules (green and white), 250 mg. and 125 mg.

New Oral Suspension (raspberry-flavored), 2 oz. bottle, 125 mg. per teaspoonful (5 cc.).

New Pediatric Drops (raspberry-flavored), 10cc. bottle, 5 mg. per drop, plastic calibrated dropper.

Average dosage: For adults, 1-2 Gm. daily in divided doses; proportionately less for children, depending on age, weight, and severity of infection.

†Literature and bibliography available on request.

*Trademark

Pfizer Science for the world's well-being

PFIZER LABORATORIES, Division, Chas. Pfizer & Co., Inc., Brooklyn 6, N. Y.



**ANKLE
SPRAINED
OR
SINUS
INFLAMED?**



ACCELERATE THE
RECOVERY
PROCESS WITH

VARIDASE BUCCAL TABLETS
STREPTOKINASE-STREPTODORNASE



U.S. PAT. OFF.

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY,
Pearl River, New York

Organization cont. from 70

Indiana, July 19, 1914. He received a B.S. degree from the Ball State Teachers College, Muncie, in 1935 and his M.D. degree from the Indiana University School of Medicine in 1939. He undertook postgraduate training in anesthesiology and in 1952 moved to Bozeman for the practice of his specialty. Dr. Parke was a member of the Gallatin County Medical Society, this Association and the American Medical Association.



UTAH

Postgraduate course in anesthesiology

The fourth annual course in anesthesiology has been announced by the College of Medicine, University of Utah, for February 9-12, primarily for the benefit of general practitioners and part-time anesthesiologists. Prominent guest speakers will deliver lectures; active participation in clinical work at private and county hospitals in Salt Lake City will be arranged for doctors in attendance at this four-day meeting. Contact Dr. R. W. Loehning, Division of Anesthesiology, University of Utah, College of Medicine, Salt Lake City, for further information.

Obituary

CLARENCE AMBROSE NYVALL

Clarence Ambrose Nyvall, M.D., long-time general practitioner in Salt Lake City, died October 18, 1958. He was 70 years old.

Dr. Nyvall was graduated from the University of Illinois Medical School in 1914. That same year he was given a license to practice in Utah.

He joined the Salt Lake County Medical Society in 1920.



WYOMING

Obituary

JAY G. WANNER

Jay George Wanner, M.D., 63, Rock Springs, suffered a fatal heart attack on Thanksgiving morning, Thursday, November 27. Born in Chicago (April 30, 1895), he attended Jenner Medical Col-

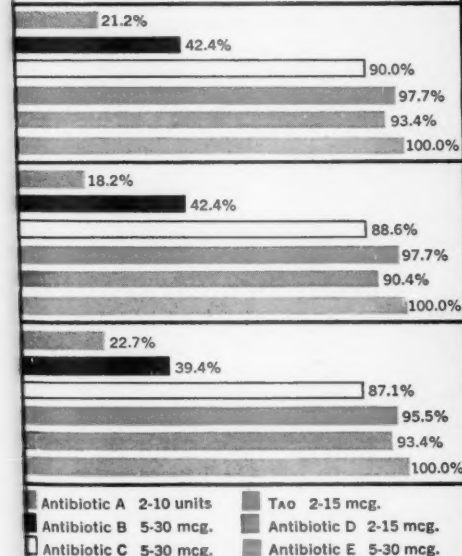
continued on 80

ROCKY MOUNTAIN MEDICAL JOURNAL

in the laboratory:

over 90% effective
against resistant staph

COMPARATIVE TESTS BY THREE METHODS
(DISC, TUBE DILUTION, CYLINDER PLATE)
ON 130 STAPHYLOCOCCI*



*Percentage of organisms inhibited by the range of concentrations listed for each antibiotic.

Other TAO advantages:

Rapidly absorbed—stable in gastric acid.⁷ TAO needs no retarding protective coating

Low in toxicity—freedom from side effects in 96% of patients treated; cessation of therapy is rarely required

Highly palatable—"practically tasteless"⁷ active ingredient in a pleasant cherry-flavored medium.

Dosage and Administration: Dosage varies according to the severity of the infection. For adults, the average dose is 250 mg. q.i.d.; to 500 mg. q.i.d. in more severe infections. For children 8 months to 8 years, a daily dose of approximately 30 mg./Kg. body weight in divided doses has been found effective. Since TAO is therapeutically stable in gastric acid, it may be administered without regard to meals.

Supplied: TAO Capsules—250 mg. and 125 mg., bottles of 60. TAO for Oral Suspension—1.5 Gm., 125 mg. per teaspoonful (5 cc.) when reconstituted; unusually palatable cherry flavor; 2 oz. bottle.

References: 1. Koch, R., and Asay, L. D.: J. Pediatr., in press. 2. Leming, B. H., Jr., et al.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 3. Mellman, et al.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 4. Olansky, S., and McCormick, G. E., Jr.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 5. Shubin, H., et al.: Antibiotics Annual 1957-1958, New York, N. Y., Medical Encyclopedia, Inc., 1958, p. 679. 6. Isenberg, H., and Karelitz, S.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 7. Wennersten, J. R.: Antibiotic Med. & Clin. Therapy 5:527 (Aug.) 1958. 8. Kaplan, M. A., and Goldin, M.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 9. Truant, J. P.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958.

TAO dosage forms— for specific clinical situations

TAO Pediatric Drops

For children—flavorful, easy to administer.

Supplied: When reconstituted, 100 mg. per cc. Special calibrated droppers—5 drops (approx. 25 mg. of TAO) and 10 drops (approx. 25 mg. of TAO). 10 cc. bottle.

TAO-AC (TAO analgesic, antihistaminic compound)

To eradicate pain and physical discomfort in respiratory disorders.

Supplied: In bottles of 36 capsules.

TAOMID* (TAO with triple sulfas)

For dual control of Gram-positive and Gram-negative infections.

Supplied: Tablets, bottles of 60. Oral Suspension, bottles of 60 cc.

Intramuscular or Intravenous

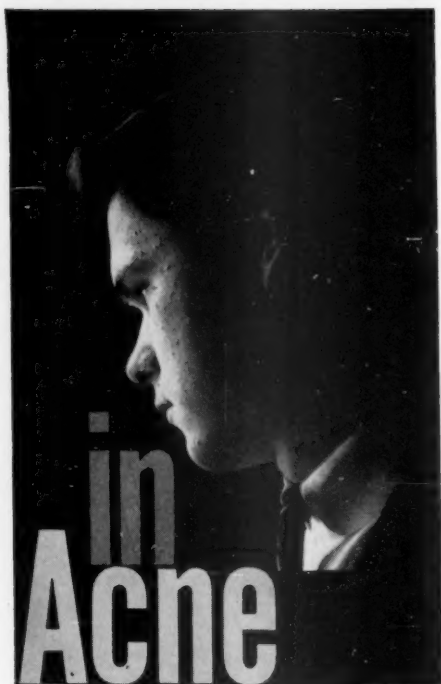
For direct action—in clinical emergencies.

Supplied: In 10 cc. vials.

*TRADEMARK



New York 17, N. Y.
Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-Being



"No patient failed to improve."

*pHisoHex washing added to standard treatment in acne produced results that "...far excelled...results with the many measures usually advocated."*¹

pHisoHex maintains normal skin pH, cleans and degerms better than soap. In acne, it removes oil and virtually all skin bacteria *without scrubbing*.

For best results—four to six washings a day with pHisoHex will keep the acne area "surgically" clean.

1. Hodges, F. T.: *GP* 14:86, Nov., 1956.

pHisoHex®

Sudsing
nonalkaline
antibacterial
detergent—
nonirritating,
hypoallergenic.
Contains 3%
hexachlorophene.

Winthrop LABORATORIES
New York 18, N. Y.

Organization cont. from 76

lege (three courses) and Chicago Hospital College of Medicine and Surgery, later known as Chicago Medical College (one course), graduating in 1918. He was licensed in Wyoming (1919) and practiced general medicine in Wheatland, Lyman and Green River. In the 1920's he began practicing E.E.N.T. and located in Rock Springs for the remainder of his career. He was a veteran of World War II, serving in the Aleutian campaign as well as several stateside assignments. He completed his service in 1946 as Lieutenant Colonel. Dr. Wanner is survived by his widow, two sons and several grandchildren.



First Annual Cancer Seminar

The First Annual Cancer Seminar to be held in Nevada is scheduled for March 25-26, in Reno at the Riverside Hotel.

Many medical organizations in Nevada have banded together to make this program one of the truly great scientific meetings in this region. Included in the list of sponsors are the Nevada State Medical Association, Nevada Division of the American Cancer Society, Nevada Chapter of the International College of Surgeons, AAGP, Nevada Public Health Department and the Veterans Administration.

Many outstanding nationally known cancer specialists will be guest speakers on this first program. For further information please contact Mr. Ralph Nelson, Executive Director, Nevada Division of the American Cancer Society, P. O. Box 55, Carson City, Nevada.



Rocky Mountain Traumatic Surgical Society

The Rocky Mountain Traumatic Surgical Society will hold its meeting January 28-31, 1959, in Aspen, Colorado. A distinguished panel of physicians, nationally known, will speak.

Col. Robert D. Anderson, M.C. U.S.A., Chief

ROCKY MOUNTAIN MEDICAL JOURNAL

in peptic ulcer

REFRACTORY
CASES
RESPOND TO

NEW

DARICON* tablets

OXYPHENCYCLIMINE HYDROCHLORIDE

POTENT ANTICHOLINERGIC ACTION

curbs secretion when excessive
normalizes motility when overactive

*Activity appears to be restricted to the desired site of action.
Predictable therapeutic response in refractory cases.*

Potency and Prolonged Duration of Action
10 mg. b.i.d. Average Dose • Supplied as:
10 mg. white, scored tablets

References: 1. Finkelstein, Murray: Journal of
Pharmacology and Experimental Therapeutics, in
press. 2. Winkelstein, Asher: Paper in preparation.

*Trademark

Pfizer Science for the world's well-being

PFIZER LABORATORIES
Division, Chas. Pfizer & Co., Inc.,
Brooklyn 6, N. Y.



for JANUARY, 1959

Orthopaedics, Fitzsimons Army Hospital. Trauma Cases—From Fitzsimons Army Hospital, Denver, Colorado.

A. C. Buerger, M.D., Orthopaedic Surgeon, Akron, Ohio. Traumatic Knee Problems.

Robert Barnard, M.D., and J. Sterling Baxter, M.D., Staff Members, Pitkin County Hospital, Aspen, Colorado. Fracture Tibias.

Sidney E. Blanford, M.D., Assistant Clinical Professor-Plastic Surgeon, University of Colorado Medical School, Denver, Colorado. "Hand Reconstruction."

Charles S. Houston, M.D., F.A.C.P., Internal Medicine, Aspen, Colorado. "Mountain Sickness—a Commonly Mistaken Diagnosis."

Robert D. Hall, M.D., Orthopaedic Surgeon, Grand Junction, Colorado. Traumatic Cervical Injuries.

John L. Leidholdt, M.D., Orthopaedic Surgeon, Denver, Colorado. "Non Osseous Injuries About the Knee and Ankle."

William F. Stanek, M.D., Assistant Clinical Professor-Orthopaedic Surgeon, University of Colorado Medical School, Denver, Colorado. Fracture Forearms.

Ralph M. Stuck, M.D., Assistant Professor-Neurosurgeon, University of Colorado Medical School, Denver, Colorado.

Richard Stuteville, M.D., Neurosurgical Department, University of Colorado Medical School, Denver, Colorado. "Intercerebral Hematoma Due to Trauma."

Richard W. Yore, M.D., Thoracic Surgery, St. Louis, Missouri. Traumatic Injuries to the Chest.

Paul Evans, M.D., and Charles Hutter, M.D., Department of Orthopaedics, University of California, Los Angeles, California. "Fluophane Anaesthesia in Spinal Fusion."

Donald Davenport, M.D., Long Beach, California. "Injuries to the Spleen and Their Treatment."

For further information, please contact Dr. Robert R. Oden, 420 Hyman Street, Aspen, Colorado.

Midwinter Clinics

Preliminary Program

February 17-20, 1959, Denver

The Colorado State Medical Society Midwinter Clinics will hold all of its meetings in the Shirley-Savoy Hotel instead of having dry clinics at various Denver hospitals. Interesting panels with outstanding guest speakers will be presented each morning February 18, 19, 20, followed by formal papers in the afternoons.

Tuesday, February 17

House of Delegates

Orientation Course (all day)

Stag Dinner followed by entertainment

Wednesday, February 18

8:15 a.m. Scientific Movies

9:30 Ob-Gyn Panel

Perinatal Morbidity and Mortality

Dr. W. L. Crawford, Rockford, Ill.

Dr. Ralph Benson, Portland, Oregon

12:00 Luncheon period open

2:00 "Medical Problems of Adolescence," C. Henry Kempe, M.D., Denver

2:20 "Surgical Treatment of Mid-Trimester Abortion," Dr. Benson

2:50 Intermission

3:20 Topic to be announced, Dr. Crawford

3:50 "Incompetent Cervical Os as a Cause of Fetal Loss," Drs. E. Stewart Taylor and Richard R. Hansen, Denver

4:10 Evening open

Thursday, February 19

8:15 a.m. Scientific Movies

9:30 Surgery and Radiology Panel

The Acute Abdomen

Dr. Philip Thorek, Chicago, Illinois

Dr. Webster Brown, Baltimore, Maryland

12:00 Luncheon period open

2:00 "Cancer of the Thyroid Not One Disease," Dr. Kenneth C. Sawyer, Denver

2:20 "Upper Gastrointestinal Problems," Dr. Brown

continued on 86

Taylor Hearing Center

28th year
serving the hard of hearing

Always the latest developments in hearing aids

Friendly dependable service.

Complete modern testing with Puretone and speech audiometers

Two offices
for your convenience

413 16th Street, Denver
between Glenarm and Tremont Places
MAin 3-1920

8 West Ellsworth, Denver
RAce 2-4551

in corticosteroid
therapy of
allergic diseases
asthma-hay fever
allergic rhinitis
allergic dermatitis
drug reactions



Decadron

DEXAMETHASONE *

to treat more patients more effectively

a new order of magnitude in therapeutic effectiveness
a new order of magnitude in margin of safety

Excellent and good-to-excellent results are reported† with DECADRON in nearly all of 362 patients with various allergic disorders, including a number of cases who had failed to respond to other corticosteroids. No major reactions were observed in these extensive clinical studies even after four months of continuous therapy—DECADRON produced no peptic ulcer, no diabetes, no significant hypertension, no sodium retention, no potassium depletion, no edema, no undesirable psychic reactions, and no unusual or new side effects. Less than five per cent of patients experienced minor reactions, none of which prevented continuing administration of DECADRON.

Moreover, several investigators report that side effects induced by previous corticosteroid therapy such as gastric

intolerance, peripheral edema, headache, vertigo, muscle weakness, ecchymoses, flushing, sweating, moon facies, hypertension, hirsutism, and acne often disappeared during therapy with DECADRON.

†Analysis of clinical reports.

Dosage: One 0.75 mg. tablet of DECADRON will replace one 4 mg. tablet of methylprednisolone or triamcinolone, one 5 mg. tablet of prednisone or prednisolone, one 20 mg. tablet of hydrocortisone, or one 25 mg. tablet of cortisone.

Detailed information on dosage and precautions is available to physicians on request.

Supplied: As 0.75 and 0.5 mg. scored, pentagon-shaped tablets in bottles of 100.

©1958 Merck & Co., Inc. *DECADRON is a trademark of Merck & Co., Inc.



MERCK SHARP & DOHME
DIVISION OF MERCK & CO., INC., PHILADELPHIA 1, PA.

Orthopaedics, Fitzsimons Army Hospital. Trauma Cases—From Fitzsimons Army Hospital, Denver, Colorado.

A. C. Buerger, M.D., Orthopaedic Surgeon, Akron, Ohio. Traumatic Knee Problems.

Robert Barnard, M.D., and J. Sterling Baxter, M.D., Staff Members, Pitkin County Hospital, Aspen, Colorado. Fracture Tibias.

Sidney E. Blanford, M.D., Assistant Clinical Professor-Plastic Surgeon, University of Colorado Medical School, Denver, Colorado. "Hand Reconstruction."

Charles S. Houston, M.D., F.A.C.P., Internal Medicine, Aspen, Colorado. "Mountain Sickness—a Commonly Mistaken Diagnosis."

Robert D. Hall, M.D., Orthopaedic Surgeon, Grand Junction, Colorado. Traumatic Cervical Injuries.

John L. Leidholdt, M.D., Orthopaedic Surgeon, Denver, Colorado. "Non Osseous Injuries About the Knee and Ankle."

William F. Stanek, M.D., Assistant Clinical Professor-Orthopaedic Surgeon, University of Colorado Medical School, Denver, Colorado. Fracture Forearms.

Ralph M. Stuck, M.D., Assistant Professor-Neurosurgeon, University of Colorado Medical School, Denver, Colorado.

Richard Stuteville, M.D., Neurosurgical Department, University of Colorado Medical School, Denver, Colorado. "Intercerebral Hematoma Due to Trauma."

Richard W. Yore, M.D., Thoracic Surgery, St. Louis, Missouri. Traumatic Injuries to the Chest.

Paul Evans, M.D., and Charles Hutter, M.D., Department of Orthopaedics, University of California, Los Angeles, California. "Fluophane Anaesthesia in Spinal Fusion."

Donald Davenport, M.D., Long Beach, California. "Injuries to the Spleen and Their Treatment."

For further information, please contact Dr. Robert R. Oden, 420 Hyman Street, Aspen, Colorado.

Midwinter Clinics

Preliminary Program

February 17-20, 1959, Denver

The Colorado State Medical Society Midwinter Clinics will hold all of its meetings in the Shirley-Savoy Hotel instead of having dry clinics at various Denver hospitals. Interesting panels with outstanding guest speakers will be presented each morning February 18, 19, 20, followed by formal papers in the afternoons.

Tuesday, February 17

House of Delegates

Orientation Course (all day)

Stag Dinner followed by entertainment

Wednesday, February 18

8:15 a.m. Scientific Movies

9:30 Ob-Gyn Panel

Perinatal Morbidity and Mortality

Dr. W. L. Crawford, Rockford, Ill.

Dr. Ralph Benson, Portland, Oregon

12:00 Luncheon period open

2:00 "Medical Problems of Adolescence," C. Henry Kempe, M.D., Denver

2:20 "Surgical Treatment of Mid-Trimester Abortion," Dr. Benson

2:50 Intermission

3:20 Topic to be announced, Dr. Crawford

3:50 "Incompetent Cervical Os as a Cause of Fetal Loss," Drs. E. Stewart Taylor and Richard R. Hansen, Denver

4:10 Evening open

Thursday, February 19

8:15 a.m. Scientific Movies

9:30 Surgery and Radiology Panel

The Acute Abdomen

Dr. Philip Thorek, Chicago, Illinois

Dr. Webster Brown, Baltimore, Maryland

12:00 Luncheon period open

2:00 "Cancer of the Thyroid Not One Disease," Dr. Kenneth C. Sawyer, Denver

2:20 "Upper Gastrointestinal Problems," Dr. Brown

continued on 86

Taylor Hearing Center

28th year
serving the hard of hearing

Always the latest developments in hearing aids

Friendly dependable service.

Complete modern testing with Puretone and speech audiometers

Two offices
for your convenience

413 16th Street, Denver
between Glenarm and Tremont Places
MAin 3-1920

8 West Ellsworth, Denver
RAce 2-4551

in corticosteroid
therapy of
allergic diseases
asthma-hay fever
allergic rhinitis
allergic dermatitis
drug reactions



Decadron^{*}

DEXAMETHASONE

to treat more patients more effectively

a new order of magnitude in therapeutic effectiveness
a new order of magnitude in margin of safety

Excellent and good-to-excellent results are reported† with DECADRON in nearly all of 362 patients with various allergic disorders, including a number of cases who had failed to respond to other corticosteroids. No major reactions were observed in these extensive clinical studies even after four months of continuous therapy—DECADRON produced no peptic ulcer, no diabetes, no significant hypertension, no sodium retention, no potassium depletion, no edema, no undesirable psychic reactions, and no unusual or new side effects. Less than five per cent of patients experienced minor reactions, none of which prevented continuing administration of DECADRON.

Moreover, several investigators report that side effects induced by previous corticosteroid therapy such as gastric

intolerance, peripheral edema, headache, vertigo, muscle weakness, ecchymoses, flushing, sweating, moon facies, hypertension, hirsutism, and acne often disappeared during therapy with DECADRON. †Analysis of clinical reports.

Dosage: One 0.75 mg. tablet of DECADRON will replace one 4 mg. tablet of methylprednisolone or triamcinolone, one 5 mg. tablet of prednisone or prednisolone, one 20 mg. tablet of hydrocortisone, or one 25 mg. tablet of cortisone.

Detailed information on dosage and precautions is available to physicians on request.

Supplied: As 0.75 and 0.5 mg. scored, pentagon-shaped tablets in bottles of 100.

©1958 Merck & Co., Inc. *DECADRON is a trademark of Merck & Co., Inc.



MERCK SHARP & DOHME
DIVISION OF MERCK & CO., Inc., PHILADELPHIA 1, PA.

Organization cont. from 82

2:50 Intermission

3:20 "Intestinal Obstruction," Dr. Thorek

3:50 "Diagnosis and Management of Regional Enteritis," Dr. Edward J. Donovan, Denver

4:10 Adjourn

6:00 Banquet and entertainment at the Petroleum Club, Denver

Friday, February 20

House of Delegates meeting

9:30 Orthopedics and Physical Medicine Panel

"Common Fractures of Wrist and Ankle"; Neck injuries—medicolegal aspects

Dr. William H. Bickel, Rochester, Minnesota

Dr. Miland E. Knapp, Minneapolis, Minnesota

12:00 Luncheon period open

2:00 "Clinical Analysis of Subdural Hematoma—Report of 100 Cases," Drs. Charles G. Freed and Harry R. Boyd, Denver

2:20 Topic to be announced, Dr. Bickel

2:50 Intermission

3:20 Topic to be announced, Dr. Knapp

3:50 Early rehabilitation for Maxillo-Facial defects, Dr. Clayton K. Mammel, Denver

4:10 Adjourn

Colorado activities at Minneapolis meeting

Colorado officers attending the Clinical Meeting of the American Medical Association in Minneapolis last month did their best, and with some success, to bring about continuance of national support for the policies long advocated by our State Society.

Both of your Delegates were appointed to A.M.A. House of Delegates committees. Dr. Ev Munro served as Chairman of the Tellers for the House, and the undersigned was appointed as one member of the Reference Committee on Hygiene and Public Health. Your Alternates, Drs. Irv Hendryson of Denver and Harlan McClure of Lamar

appeared before reference committees, particularly the Reference Committee on Insurance and Medical Service, which was the one handling the report of the Commission on Medical Care Plans and other matters relating to the principle of free choice. President John Zarit also spoke twice before that same reference committee, and assistance at the hearings was also given by President-elect McDonald, Executive Secretary Harvey Sethman, and Assistant Executive Secretary John Pompelli. Even their other committee jobs did not prevent your two Delegates from taking part in these hearings, and Dr. Munro made our principal presentation in the matter of a resolution suggesting the creation of a new A.M.A. Council for the single purpose of studying and guiding prepayment and insurance types of medical plans.

Our new resolution was not adopted, and it may be that we were a bit premature in presenting it. We felt, and still feel, that the A.M.A.'s Council on Medical Service has been assigned such a multitude of jobs to do that its operations are becoming unwieldy, and it is time for creation of another Council to take over perhaps half of the work. So far the Reference Committees and the House of Delegates as a whole do not agree with us. Well, perhaps they will change their minds before too long!

As the succeeding report by our friend "Bing" Blasingame says, the report of the Commission on Medical Care Plans was postponed for six months. I think it is not immodest to say that your Colorado delegates organized and led the campaign before the reference committee which obtained that postponement. We were joined by many other states, after it had become crystal clear that distribution of the report had been entirely too limited. Even state Presidents had not been accorded copies of it.

Most members will recall that the up-coming and promised report of that Commission was referred to, and was offered as an excuse or reason, when certain A.M.A. officials last spring sought to avoid carrying out a direct mandate of the House of Delegates calling for a public



Camby says, "CAMBRIDGE DAIRY has been producing QUALITY MILK for Denver babies since 1892."

We Invite Your Inspection and Appreciate Your Recommendation

SKyline 6-3651

690 So. Colorado Blvd.

Allergy-free...all day...
with this much medication



Typically, the allergic patient can enjoy a whole day's freedom from symptoms with just one Pyribenzamine Lontab in the morning—a whole night of restful sleep with just one Lontab in the evening.

The outer shell of the unique Lontab actually contains an effective dose of Pyribenzamine which is released minutes after the Lontab enters the stomach. Thereafter, medication is released uniformly and continuously from the specially formulated inner core of the Lontab—sustaining antiallergic effect as long as 12 hours.

For patients who need only periodic medication, regular Pyribenzamine tablets provide fast, dependable action, with a minimum of undesirable side effects.

SUPPLIED: Pyribenzamine Lontabs—full-strength—100 mg. (light blue). Pyribenzamine Lontabs—half-strength—50 mg. (light green); for children over 5 and adults who require less antiallergic medication. Pyribenzamine Regular Tablets, 50 mg. (green, scored) and 25 mg. (green, sugar-coated).

Pyribenzamine® hydrochloride (*tripelenamine hydrochloride* CIBA) **Lontabs®** (*long-acting tablets* CIBA)

1/2021W

C I B A SUMMIT, N. J.

Pyribenzamine[®] Lontabs[®]

JUST ONE KEEPS YOUR ALLERGIC PATIENT ON A 12-HOUR THERAPEUTIC PLATEAU

YOU CAN ORDER

Reprints

of any feature article or advertisement appearing in

The ROCKY MOUNTAIN MEDICAL JOURNAL

Orders must be placed within 30 days of date of publication. Minimum charge applies for 300 copies or less.

The cost is very reasonable. For further information write to your Medical Journal business or editorial office, or to—

Publishers Press

(Printers of
The Rocky Mountain Medical Journal)
1830 Curtis Street, Denver 2, Colorado

The COCKS-CLARK ENGRAVING CO.

PHOTOENGRAVERS
DESIGNERS

2200 ARAPAHOE ST.
DENVER 2, COLORADO

PROMPT SERVICE

campaign in favor of the Free Choice of Physician. The House had voted such a directive a year ago at the Philadelphia meeting, but almost nothing was done by A.M.A. officers except to ask for postponement when the House met again in June in San Francisco. Then, on a motion by Colorado, the A.M.A. House verbally spanked all of the officers who had failed to act and who had asked permission to continue to do nothing. The House said "no further delays will be tolerated," and directed the officers to start the campaign immediately. Action was still a bit slow, the first meeting on the subject being held August 1, but campaign materials were finally developed and made available to state and county medical societies in the early fall.

It is our interpretation of the various national actions that this public campaign is to be continued until further notice, since the A.M.A. House took no action in Minneapolis to change its instructions of last June.

At this Minneapolis meeting, as in most meetings for many years, the Colorado delegation maintained a small hotel parlor where Colorado physicians and their wives could meet friends and extend hospitality to the officers and delegates from other states. Minneapolis as a city extended warm hospitality to all of us and in every respect it should be considered a successful meeting.

Kenneth C. Sawyer, M.D.,
Senior Delegate.



NATIONAL AFFAIRS

Report on actions of the House of Delegates, American Medical Association

Twelfth Clinical Meeting
December 2-5, 1958
Minneapolis

Health care of the aged, the report of the A.M.A. Commission on Medical Care Plans, osteopathy, expansion of medical education facilities, the Association's administrative changes, the report of the Committee to Study A.M.A. Objectives and Basic Programs, and voluntary health organization fund raising were among the wide variety of issues considered by the House of Delegates at the American Medical Association's Twelfth Clinical Meeting held December 2-5 in Minneapolis.

Dr. Lonnie A. Coffin of Farmington, Iowa, was named the 1958 General Practitioner of the Year

continued on 92

ROCKY MOUNTAIN MEDICAL JOURNAL

STAPHYLOCOCCAL INFECTIONS

Excerpts from Reports Read at the Antibiotics Symposium

Spontin In Treating Severe Respiratory Infections

—"In 13 of 20 patients the results were excellent, with clinical response being evident within one to four days after institution of therapy. In three additional patients, there was some degree of improvement in pneumonic processes superimposed on tuberculosis in two cases and on pulmonary neoplasm in one. In all other cases, serious antecedent pathology undoubtedly influenced the negative or equivocal response to ristocetin therapy.⁶"

Spontin In Treating Staphylococcal Infections—After successfully treating 28 patients, the authors wrote, "Ristocetin or Spontin has proved to be bactericidal and bacteriostatic, particularly for the *Staphylococcus aureus*, which is often resistant to many other antibiotics.⁵"

Spontin In Treating Seven Difficult Cases—"Ristocetin has produced excellent results in eradicating, mitigating or preventing infection in seven selected difficult cases. Six of the seven cases involved *Staphylococcus aureus* which did not respond to chemotherapy with other antibiotics.⁷"

Spontin Blood Levels In Children—"Ristocetin was administered as a single intravenous injection of 12.5 milligrams per kilogram. This resulted in serum levels ranging from 1.3 to 10.6 mcg. after two hours with a gradual fall to a level of 0.7 mcg. per cubic centimeter or less after 12 hours.⁸"

Spontin In Treating Staphylococcal Pneumonia

—"Ristocetin was used in the treatment of 24 patients with staphylococcal pneumonia, 17 of whom had failed to respond to previously administered antibiotics. Complete clearing of pneumonitis was obtained in 16 patients and significant improvement occurred in two others. Two patients died of pneumonia; four others succumbed to other lethal diseases.⁹"

Spontin In Treating Children and Adults—"Ristocetin completely controlled severe staphylococcal infections in 11 adults and six children who received adequate therapy.¹⁰"

1. Totals represent published reports and personal communications to Abbott Laboratories.
2. Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 15, 16, 17, 1958.
3. Romansky, M. J., and Holmes, R., Successful Short-Term Therapy of Enterococcal and Staphylococcal Endocarditis with Ristocetin—Seven Patients. Preliminary Report, Antibiotics Annual, 1957-58, p. 187.
4. J. A. M. A., 167:1584, July 26, 1958.
5. Bush, L. F., et al., The Use of Ristocetin (Spontin) in Staphylococcal Infections, In Press, Antibiotics Annual, 1958-59.
6. Billow, F. J., et al., Clinical Observations on Ristocetin—A Preliminary Report on its Efficacy and Toxicity in 20 Unselected Severe Respiratory Infections, In Press, Antibiotics Annual, 1958-59.
7. Miller, J. M., et al., Ristocetin in the Treatment of Seven Selected Difficult Cases, In Press, Antibiotics Annual, 1958-59.
8. Asay, L. D., et al., Ristocetin Serum Levels in Children, In Press, Antibiotics Annual, 1958-59.
9. Schumacher, L. R., et al., Experiences with Ristocetin in Staphylococcal Pneumonia: Observations in 23 Cases, In Press, Antibiotics Annual, 1958-59.
10. Terry, R. B., Ristocetin in Children and Adults, In Press, Antibiotics Annual, 1958-59.

for his outstanding contributions to the health and civic affairs of his home community. Dr. Coffin, who is the first Iowan to receive the annual GP award, accepted his gold medal on behalf of "all the men who have dedicated their lives to the general practice of medicine."

Speaking at the Tuesday opening session of the House, Dr. Gunnar Gundersen of La Crosse, Wis., A.M.A. President, called upon the medical profession to exert leadership and imagination in meeting the problems of these changing times. Urging practical actions to solve medico-economic challenges, Dr. Gundersen declared that "the time has passed for policies based on generalities, platitudes and flag-waving." He also suggested that the Association offer support and cooperation to proposals for an International Medical Year.

Governor Orville L. Freeman of Minnesota, who also addressed the opening session, asked for "the help of the leaders of the medical profession in working out a program that will most adequately meet the needs of our older citizens for health care and services of the highest quality."

With half a day still to go, total registration Thursday evening had reached 4,880, including 2,870 physicians.

Health care of the aged

Responding to Dr. Gundersen's call for action and Gov. Freeman's plea for help in meeting the health care needs of the aged, the House of Delegates adopted the following proposal submitted by the Council on Medical Service and endorsed by the Board of Trustees:

"For persons over 65 years of age with reduced incomes and very modest resources, it is necessary immediately to develop further the voluntary health insurance or prepayment plans in a way that would be acceptable both to the recipients and the medical profession. The medical profession must continue to assert its leadership and responsibility for assuring adequate medical care for this group of our citizens.

"Therefore, the Council on Medical Service recommends to the House of Delegates the adoption of the following proposal: That the American Medical Association, the constituent and component medical societies, as well as physicians everywhere, expedite the development of an effective voluntary health insurance or prepayment program for the group over 65 with modest resources or low family income; that physicians agree to accept a level of compensation for medical services rendered to this group which will permit the development of such insurance and prepayment plans at a reduced premium rate."

In order to effect the immediate implementation of such a program, the House directed that copies of the proposal be distributed to medical society approved plans, including Blue Shield and private insurance programs, requesting their cooperation.

Commission on Medical Care Plans

The long-awaited report of the Commission on Medical Care Plans, appointed at the 1954 Clinical Meeting in Miami, was discussed for two hours at a reference committee hearing, but the House decided to defer action until the June, 1959, meeting. In so doing, the delegates adopted this statement:

"We respectfully suggest to the constituent associations reviewing the report in the interim, that their attitude regarding the report will be clarified if they arrive at some decisions in regard to the following basic points:

"1. *Free Choice of Physician*—Acknowledging the importance of free choice of physician, is this concept to be considered a fundamental principle, incontrovertible, unalterable, and essential to good medical care without qualification?

"2. *Closed Panel Systems*—What is or will be your attitude regarding physician participation in those systems of medical care which restrict free choice of physician?

"These suggestions acknowledge that the policy of the American Medical Association to encourage and support the highest quality of medical care for all patients remains unchanged. They question,

continued on 96

PICKER X-RAY, ROCKY MOUNTAIN, INC.

EMERY L. GRAY, General Manager

WM. J. BETTS
R. S. COOK
J. K. DUNN



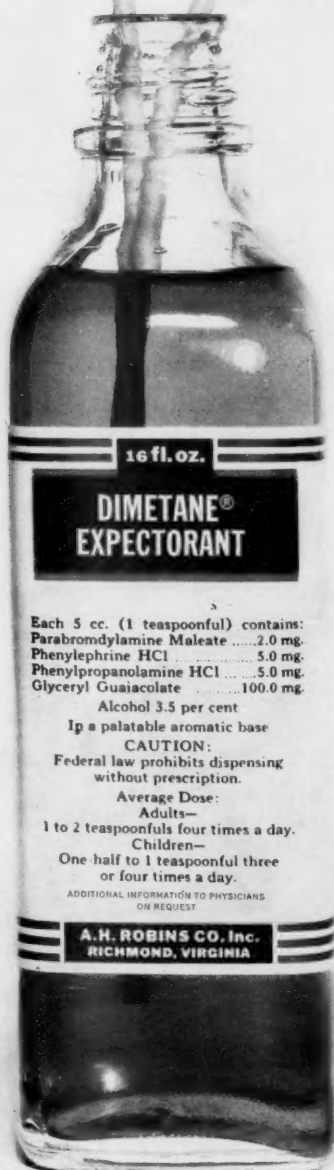
T. LARSH
L. QUINLISK

1207 East Thirteenth Ave.—Tel. AComa 2-7075—Denver 18, Colorado

new
for
cough

tastes
good

the straws just symbolize the good flavor! And DIMETANE EXPECTORANT for cough is as effective as it is delicious. FORMULA: each 5 cc. (1 teaspoonful) contains: DIMETANE (Parabromdylamine Maleate) 2.0 mg.; Glyceryl Guaiacolate 100.0 mg.; Phenylephrine Hydrochloride, USP 5.0 mg.; Phenylpropanolamine Hydrochloride, NNR 5.0 mg.; Alcohol 3.5% in a good-tasting aromatic base.



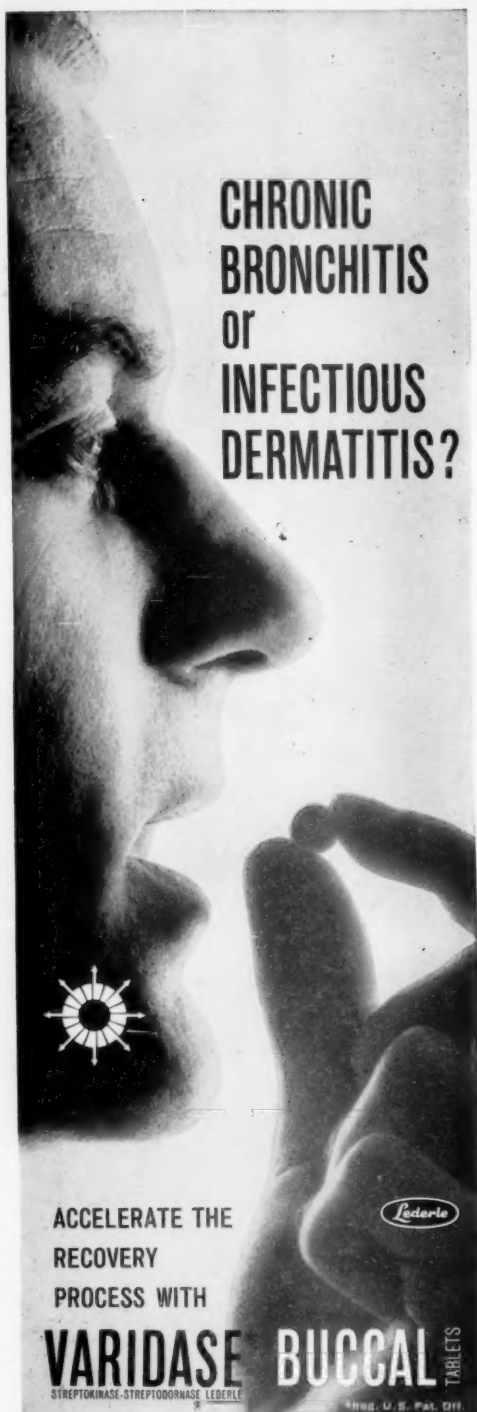
works
better

combines the unsurpassed antihistamine Dimetane with the clinically proven expectorant glyceryl guaiacolate (which increases R.T.F. almost 200%) and two recognized decongestants. When additional cough suppressant action is indicated, prescribe DIMETANE EXPECTORANT-DC, which provides the basic formula with dihydrocodeinone bitartrate 1.8 mg. per 5 cc. (exempt narcotic).


Dimetane® Expectorant
Dimetane® Expectorant-DC



(WITH DIHYDROCODEINONE BITARTRATE 1.8 MG./5CC.)




**CHRONIC
BRONCHITIS
OR
INFECTIOUS
DERMATITIS?**



**ACCELERATE THE
RECOVERY
PROCESS WITH**

VARIDASE **BUCCAL** TABLETS
STREPTOKINASE-STREPTODORNASE LEDERLE



LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY,
Pearl River, New York

Organization cont. from 92

however, whether attitudes toward the free choice of physician and the closed panel system may be undergoing evolutionary change."

The House recommended that the Board of Trustees invite the constituent associations to forward their replies to these questions to the Executive Vice President 60 days in advance of the June, 1959, meeting.

Osteopathy

Considerable discussion centered on a resolution which would have recognized that constituent medical associations have the right to establish the relationship of the medical profession to the osteopathic profession within their respective states. The House decided, however, that the resolution in question did not offer the appropriate solution to the osteopathic problem. Instead, the delegates requested the Judicial Council to review past pronouncements of the House on osteopathy and the status of the laws of the various states in this regard. The Council was asked to present its report and recommendations at the June, 1959, meeting. The House "noted with favor that the American Osteopathic Association has amended its objectives as stated in its constitution by deleting reference to the cultism of Andrew J. Still."

Medical education

The House approved a statement by the Council on Medical Education and Hospitals supporting the development of additional facilities for basic medical education, and it urged the entire profession to give that policy strong support in order to correct misinterpretations of the Association's viewpoint regarding the supply of physicians.

"American medicine," the statement points out, "fully recognizes the needs being brought about by the increasing population, social and economic trends, and the changing dimensions of medical knowledge and its application." Urging careful analysis of those needs, the statement says that existing medical schools should consider the possibility of increasing their enrollments and developing new facilities. It also declares that American medicine has the responsibility to encourage the creation of new four-year medical schools and two-year basic science programs by institutions of higher education which can provide the desirable setting.

A.M.A. administrative structure

A Board of Trustees report on the administrative structure of the Association was approved by the House, which termed the reorganization of the headquarters staff as a long and important step in the right direction. The report informed the House that the Chicago staff has been divided into the following seven divisions: Business Division,

Law Division, Communications Division, Field Division, Division of Scientific Publications, Division of Socio-Economic Activities and Division of Scientific Activities. The latter two are still in the process of development and are temporarily under the direction of the Assistant Executive Vice President. The Board also reported that the Committee on Legislation has been renamed the Council on Legislative Activities, with the Director of the Law Division as Council Secretary. This new council will undertake an enlarged, strengthened legislative program, closely coordinated with the activities of the new field staff and the Washington Office. The latter also has been reorganized, with over-all direction coming from Chicago.

A.M.A. objectives and basic programs

The House received and commended the report of the Committee to Study A.M.A. Objectives and Basic Programs, which it said may be a significant milepost in the Association's history. In approving one of the committee's recommendations, the House referred to the Council on Constitution and By-laws the following suggested amendment of Article II of the Constitution: "The objectives of the Association are to promote the science and art of medicine and the betterment of public health and an understanding of the socio-economic conditions which will facilitate the attainment of these objectives."

The House also recommended that the Board of Trustees establish a mechanism which will assume the responsibility for promoting active liaison with each national medical society. "In the scientific fields," the House declared, "the role of the A.M.A. should be primarily that of leadership, but every endeavor should be made to bring about coordination of the special fields of scientific interest of the other national medical organizations." The delegates also approved a recommendation that the Board of Trustees give serious consideration to opening the publications of the Association to a free and open discussion of socio-economic problems applicable to medicine.

Fund raising

Once again considering fund raising problems which have arisen since development of the concept of united community effort, the House passed a resolution which pointed out that the action taken last June in San Francisco has been interpreted by some as disapproving the inclusion of voluntary health agencies in United Fund drives. It then stated that "the American Medical Association neither approves nor disapproves of the inclusion of voluntary health agencies in United Fund drives." The resolution also requested the Board of Trustees to arrange a top-level conference with the voluntary health agencies, the United Funds and other parties interested in the

Sandia Ranch Sanatorium

Rt. 4, Box 4104

Albuquerque, New Mexico

Telephone 4-3273



For the care and treatment of patients with nervous or mental disorders.

Licensed psychiatric hospital

20 acres landscaped grounds

Favorable year-round climate

John W. Myers, M.D., Medical Director

Alan Jacobson, M.D., Psychiatrist

Fred W. Langner, M.D., Psychiatrist

Now—All cold symptoms can be controlled



Provides Triaminic for more complete and more effective relief from nasal and paranasal congestion because of systemic transport to *all* respiratory membranes—without drawbacks of topical therapy.[†]

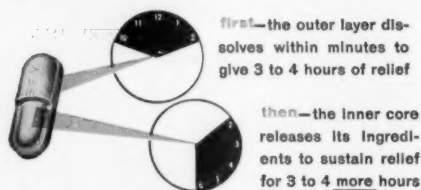
Provides well-tolerated APAP (N-acetyl-p-aminophenol) for prompt and effective analgesic and antipyretic action to make the patient more comfortable.

Provides Dormethan (brand of dextromethorphan HBr) for non-narcotic anti-tussive action on the cough reflex center in the medulla—as effective as codeine but without codeine's drawbacks.

Provides terpin hydrate, classic expectorant to thin inspissated mucus and help the patient clear the respiratory passages.

[†]Lhotka, F. M.: Illinois M. J. 112:259 (Dec.) 1957. Fabricant, N. D.: E. E. N. T. Monthly 37:460 (July) 1958. Farmer, D. F.: Clin. Med. 5:1183 (Sept.) 1958.

Special "timed release" design



also available for those patients who prefer liquid medication: Tussagesic suspension



Each TUSSAGESIC tablet provides:

TRIAMINIC® 50 mg.
(phenylpropanolamine HCl . . . 25 mg.
pheniramine maleate . . . 12.5 mg.
pyrilamine maleate . . . 12.5 mg.)

Dormethan
(brand of dextromethorphan HBr) 30 mg.
Terpin hydrate 180 mg.
APAP (N-acetyl-p-aminophenol) . . 325 mg.

Dosage: One tablet in the morning, midafternoon and in the evening, if needed.

Tussagesic® *timed-release* tablets

*Contains TRIAMINIC to  running noses  and open stuffed noses orally

SMITH-DORSEY • a division of The Wander Company • Lincoln, Nebraska • Peterborough, Canada

raising of funds for health causes, with a view toward resolving misinterpretations and other difficulties in this area.

Miscellaneous actions

In dealing with a wide variety of other subjects, the House also:

Took notice of the recent restrictive changes in the *Medicare* program; expressed regret at the substitution of federal facilities for private care in the areas mentioned, and urged the Association to encourage the re-establishment of services under the free choice principle to accomplish the original intent of the act;

Recommended that the Social Security Act be amended by Congress to permit states to combine the present four *Public Assistance* medical programs into a single medical program, administered by a single agency and making available uniformity of services to all eligible *Public Assistance* recipients in the state;

Authorized the Council on Medical Service to sponsor at the earliest practicable date a *Congress on Prepaid Health Insurance*;

Approved a plan to develop "*Buyers' Guides*" which will be sent to physicians to help their patients analyze the merits of available health insurance programs;

Approved a by-law amendment which will allow *dues exemptions* for interns and residents serving in training programs approved by the Council on Medical Education and Hospitals;

Called to the attention of all individuals or institutions responsible for *intern and resident* training that medical services provided to patients in hospitals are the responsibility of duly licensed physicians;

Encouraged the voluntary registration of the *paramedical personnel* who assist physicians, but opposed the extension of governmental licensure and governmental registration at this time;

Heartily approved and lauded the purpose, content and format of *The A.M.A. News* and recommended continuance of the publication under its present and established policies;

Agreed with the Committee on Medical Practices that *relative value studies* should be conducted by each constituent medical association but not on a national or regional basis by the A.M.A.;

Urged each constituent society to establish a committee on *rehabilitation* to carry out activities recommended by the Board of Trustees;

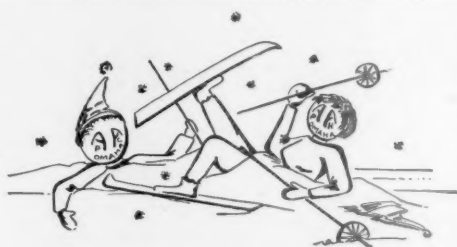
Called for continued activity at all levels to stimulate the development of effective *poliomyelitis inoculation programs*;

Suggested that the Association take immediate steps toward developing a plan whereby reserve medical units and individuals not immediately involved in military operations could be used to supplement *civil defense* operations, and

Expressed gratitude and appreciation for the long years of devoted service by *Dr. Austin Smith*, who has resigned as Editor of *The Journal of the American Medical Association*.

At the opening session, six state medical societies contributed a total of almost \$250,000 to the American Medical Education Foundation. The gifts were: California, \$150,305.75; Indiana, \$35,110; New Jersey, \$25,000; New York, \$19,608; Utah, \$9,977.50, and Arizona, \$8,657.50. In addition, the American Medical Association announced a contribution of \$100,000 to the Foundation.

It also was announced on the opening day of the meeting that *Dr. W. Linwood Ball* of Richmond, Va., A.M.A. Vice President, had been appointed to the Board of Trustees to fill the



Protection against loss of income from accident and sickness as well as hospital expense benefits for you and all your eligible dependents.

our pledge to you...

the **QUICKEST**
and **BEST** possible
SERVICE

**PUBLIC SERVICE COMPANY
OF COLORADO**



**PHYSICIANS CASUALTY & HEALTH
ASSOCIATIONS**

OMAHA 31, NEBRASKA

Since 1902

Handsome Professional Appointment Book
sent to you **FREE** upon request.

vacancy caused by the recent death of Dr. Warren Furey of Chicago. Dr. Ball, who will serve on the Board until next June, said he will not be a candidate to succeed himself.

F. J. L. Blasingame, M.D.,
Executive Vice President,
American Medical Association.



To the Editor:

Blue Cross and Blue Shield have come out with a new plan for the Old Age Pensioners, whereby they can go to Colorado General Hospital for their surgical care. Blue Shield will pay for their ambulance transportation.

I do not feel that this is at all fair to men like myself who can give the same care, in many instances, in their own offices, and then send the patient back home to return later for follow-up care. An instance of this was a lady who fell and fractured a humerus. I did her up in a hanging cast, sent her on back home and followed her

along until she got a perfect result. When I sent her a bill, she, of course, raised the roof—she could have gone to Colorado General under Blue Shield and her whole bill would have been cared for.

Another instance of this same type of injury was a man who came in with fractures of both bones of his forearm. I reduced his fractures and after I had immobilized him in plaster to the arm and forearm, I sent him home, and got a perfect result. If he had gone to Colorado General, he would have had no bill to pay, and griped when I sent him a bill for care.

A great fuss is being made about the Union members having to drive a long way for their care, but we are doing the same thing by sending all our pensioners to Colorado General, and we are paying their transportation by ambulance. In addition to that, we are making our bed shortage more pronounced by filling a bed with a person who could be cared for by his local physician and then sent home.

It looks to me as though the "Physicians' Plan" could help the physicians better by paying them for surgical care of the pensioners when they can handle a case at home and at their offices.

Sincerely yours,
FREEMAN D. FOWLER, M.D.,
Idaho Springs, Colorado.

Annual Clinical Conference

Chicago Medical Society

MARCH 2, 3, 4 and 5, 1959

Palmer House, Chicago

DAILY HALF-HOUR LECTURES by
Outstanding Teachers and Speakers on
subjects of interest to both general
practitioner and specialist

PANELS on Timely Topics

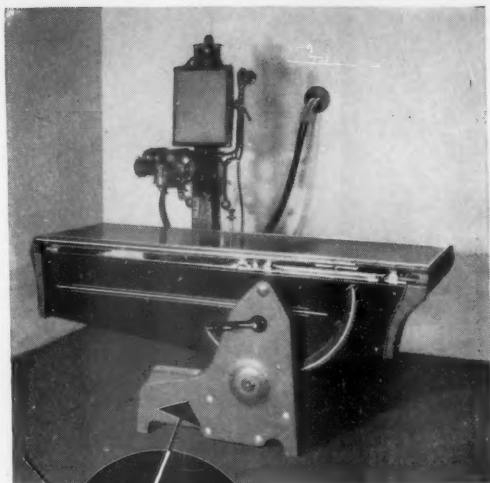
INSTRUCTIONAL Courses

TEACHING Demonstrations

MEDICAL Color Telecasts

SCIENTIFIC EXHIBITS worthy of
real study and helpful and time-saving
Technical Exhibits

• The Chicago Medical Society Annual Clinical Conference should be a **MUST** on the calendar of every physician. Plan now to attend and make your reservation at the Palmer House.



From
This
to This



All this for one monthly fee

- ✓ Enjoy the most modern x-ray facilities . . . avoid obsolescence losses
- ✓ No surprise "extras" — covers periodic inspection, maintenance, replacement tubes, parts
- ✓ Freedom to add or replace equipment as improvements appear
- ✓ G.E. pays for insurance . . . assumes problem of collecting for equipment damage
- ✓ G.E. pays local property taxes

without capital outlay

the difference is **Maxiservice[®]** rental

Here's the perfect answer for a cost-saving x-ray installation, easy to keep abreast of important new developments. G-E Maxiservice ties up *none* of your capital . . . eliminates trade-in losses — progress determines your time for exchange, not finances. In effect, you contract for *utility, convenience, flexibility and service*, not for just equipment.

For complete details, contact your G.E. X-Ray representative listed below.

Progress Is Our Most Important Product

GENERAL  ELECTRIC

DIRECT FACTORY BRANCHES

BUTTE
103 N. Wyoming St. • Phone 2-5871

DALLAS
1616 Oak Lawn Ave. • Riverside 1-1568

DENVER
3031 E. 40th Ave. • DUDley 8-4088

SALT LAKE CITY
215 S. 4th, E. • EMpire 3-2701

RESIDENT REPRESENTATIVES

ALBUQUERQUE
C. C. CARTER, 708 California St., S. E. • Phone 3-3585

BILLINGS
W. D. SHAW, 2005 Yellowstone • Phone 9-9660

COLORADO SPRINGS
I. S. PRICE, 907 Skyway Blvd. • MELrose 2-0060

EL PASO
T. B. MOORE, 8303 Magnetic Street • SKYline 5-4474

MISSOULA
J. W. TREDIK, 429 South 5th E. • Phone 9-0055



**BLUE CROSS
BLUE SHIELD**

Health care for our senior citizens

Prepayment of medical care for the elderly has long been a matter of urgent and continuing concern to the medical profession and its Blue Shield Plans. Within the past year, however, this problem has been made something of a political issue through the introduction of such legislation as the Forand Bill, which, if adopted, might radically affect the future of the entire voluntary health care movement in America.

What are the facts concerning Blue Shield coverage of senior citizens? What has the medical profession accomplished, through Blue Shield, to meet this challenge?

The answers to these questions will be of immediate interest as a new Congress meets—a Congress in which social welfare programs are certain to be accorded a high priority.

Some of these answers, as reported recently to A.M.A.'s Council on Medical Service by the National Association of Blue Shield Plans, are truly encouraging.

Thus, in 1951, among a total Blue Shield enroll-



"You're lucky your husband's a doctor—you can get sick whenever you want to."

ment of 21 million persons, nearly a million, or a little less than 5 per cent, were over 65 years of age. Six years later, in 1957, among the total of 40 million persons enrolled, 2½ million, or 6½ per cent, were over age 65. Thus, in these six years, the number of Blue Shield members over 65 increased 170 per cent, while total Blue Shield enrollment increased only about 85 per cent.

Attention was called, also, to the fact that of the total number of people past 65 who have medical-surgical insurance coverage, about two-thirds are covered by Blue Shield.

Of all the people in the U. S., it is estimated currently that about 15 million are over 65 years old, and are not cared for by an established institution or agency. This represents approximately 8 per cent of the total population. Thus Blue Shield's ratio of 6½ per cent over age 65 is reasonably related even now to the ratio of the total



sickroom supplies
oxygen service
Trained Technicians
PEarl 3-4651
350 Broadway—Denver

24-HOUR SERVICE

ABBAY RENTS
SALES-RENTALS

**Don't miss
important telephone calls . . .**

Let us act as your secretary while you are away, day or night; our kindly voice conscientiously tends your telephone business, accurately reports to you when you return.

TELEPHONE 
ANSWERING
SERVICE
CALL ALpine 5-1414

ARTIFICIAL EYES

Plastic eyes and glass eyes special made to fit the most difficult cases. An expert eye-maker is in our office at all times to give your patients the satisfaction they must have. In business since 1906.



Write or phone for full details.

DENVER OPTIC COMPANY
Telephone MA. 3-5638
330 University Bldg. 910 16th St. Denver 2, Colo.



THE EMORY JOHN BRADY HOSPITAL

401 Southgate Road COLORADO SPRINGS, COLORADO
MElrose 4-8828

For the care and treatment of Psychiatric disorders.

Individual and Group Psychotherapy and Somatic Therapies.

Occupational, diversional and outdoor activities.

X-ray, Clinical Laboratory and Electroencephalography.

E. JAMES BRADY, M.D., *Medical Director*

CAMPBELL F. RICE, *Superintendent*

Francis A. O'Donnell, M.D., Paul A. Draper, M.D., Charles W. McClellan, M.D.

Richard L. Conde, M.D., Robert W. Davis, M.D.



PHENAPHEN[®] PLUS

Phenaphen Plus is the physician-requested combination of **Phenaphen**, plus an antihistaminic and a nasal decongestant.



Available on prescription only.

each coated tablet contains: **Phenaphen**

Phenacetin (3 gr.) 194.0 mg.

Acetylsalicylic Acid (2½ gr.) 162.0 mg.

Phenobarbital (¼ gr.) 16.2 mg.

Hyoscyamine Sulfate 0.031 mg.

plus

Prophepyridamine Maleate 12.5 mg.

Phenylephrine Hydrochloride 10.0 mg.

OTITIS MEDIA or FRACTURED TIBIA?



ACCELERATE THE
RECOVERY
PROCESS WITH

VARIDASE* **BUCCAL** TABLETS

STREPTOKINASE-STREPTODORNASE LEGERLE

*Reg. U. S. Pat. Off.

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY,
Pearl River, New York

population in that group—and rapidly approaching parity with it.

Blue Shield has always sought to serve medicine's inescapable responsibility to the whole community. It was until recently almost an exclusively Blue Shield feature that any member on retirement, or on leaving an insured group, could retain his coverage by "conversion" to a "direct-pay" basis. Few plans impose any age limits on initial group enrollment, and an increasing number of plans are accepting non-group members regardless of age.

Blue Shield is aware of medicine's responsibility to our senior citizens, and is prepared to follow the guidance and leadership of the profession in helping it meet this challenge.

Submission of bills for services rendered to Army military personnel by civilian hospitals and physicians

As a general rule, civilian medical agencies are aware of the appropriate channels for submission of their charges for care furnished Army military personnel. They are informed of the correct procedure, either by prior arrangement with the appropriate military authority for routine medical care of personnel under their jurisdiction, or through notification to the patient's commanding officer, or the Surgeon of the Army area in which emergency type of service is rendered.

In situations where the above does not apply or when the civilian medical agency is in doubt concerning the normal procedure, bills may be submitted directly to Headquarters Fifth U. S. Army, Office of Army Surgeon, 1660 East Hyde Park Boulevard, Chicago 15, Illinois, with a request that they be placed in appropriate channels for settlement.

Such bills should show name, rank, service number, organization and duty station of the patient, disease or disability treated, inclusive dates and nature of the services, and a brief statement of the incident leading to the treatment.

continued on 109

Oculist Prescription Service Exclusively

**Shadford-Fletcher
Optical Co.**

Guild
Dispensing Opticians

218 16th Street, AC. 2-2611 Main Office
3705 E. Colfax (Medical Center Bldg.) FL. 5-0202
1801 High Street, FLORIDA 5-1815
2465 South Downing, SPRUCE 7-2424
DENVER, COLORADO
1140 Spruce Street, Boulder, Colorado

1 Ladies and gentlemen: learn all about new VITERRA PEDIATRIC, a good supplement in a great new package.

2 First, see what happens when you push the metered plunger.

3 Aha! An exact 0.6 cc. comes out this spout. Never more, never less.

4 And notice — no drip, no waste, no sticky bottle.

5 On your right, see the Metered-Flow bottle's tight seal. No risk of contamination.

6 Let's take a minute to admire the formula.

7 That means no hot-weather loss of potency.

8 Now for a farewell treat, a taste of delicious, orange-y VITERRA PEDIATRIC. How will you have it — in fruit juice? On cereal? Straight from the spoon?

VITERRA® PEDIATRIC

each 0.6 cc. contains:

		M	I	N
		Infants	Children	
A (synthetic)	5000 U.S.P. Units	333%	167%	
D (Calciferol)	1000 U.S.P. Units	250%	250%	
B ₁ (Thiamine)	1 mg.	400%	133%	
B ₂ (Riboflavin)	1 mg.	167%	110%	
B ₆ (Pyridoxine)	1 mg.	11	11	
B ₁₂ (Cyanocobalamin)	1 mcg.	11	11	
C (Ascorbic Acid)	50 mg.	500%	250%	
Niacinamide	10 mg.	200%	133%	
Panthenol	2 mg.			

In a d-sorbitol base for better vitamin B₁₂ absorption
 †† Minimum daily requirement has not been established.
 DOSAGE: 0.6 cc. or as directed by physician.
 In 50 cc. bottles

no refrigeration needed

VITERRA® PEDIATRIC  **METERED-FLOW BOTTLE**

ALLOW 30 SECONDS BETWEEN DISPENSINGS

Special note to doctors who took this tour:

Problems of over- and under-dosage, spillage, spoilage or leakage disappear with VITERRA PEDIATRIC's new Metered-Flow bottle. Why not consider these advantages when you recommend a vitamin supplement?



New York 17, N. Y.
 Division, Chas. Pfizer & Co., Inc.
 Science for the world's well-being

The Colorado State Medical Society

Clinical Session, February 17-20, 1959
Denver

President: John I. Zarit (Chairman of the Board), Denver.
President-elect: John L. McDonald, Colorado Springs.
Vice President: Robert P. Harvey (Vice Chairman of the Board), Denver.
Treasurer: William C. Service, Colorado Springs, 1959.
Constitutional Secretary: Harry C. Hughes, Denver, 1960.
Additional Trustees: Bernard T. Daniels, Denver, 1959; Carl W. Swartz, Pueblo, 1960; Fred R. Harper, Denver, 1961; Walter M. Boyd, Greeley, 1961.
Delegates to the American Medical Association: Kenneth C. Sawyer, Denver, 1960; (Alternate, Irvin E. Hendryson, Denver, 1960); E. H. Munro, Grand Junction, 1960; (Alternate, Harlan E. McClure, Lamar, 1959).
Executive Secretary: Mr. Harvey T. Sethman, 835 Republic Building, Denver 2, Colorado; Telephone AComa 2-0547.

New Mexico Medical Society

Annual Session, May 5-7, 1959
Las Cruces

President: James C. Sedgwick, Las Cruces.
President-elect: Lewis M. Overton, Albuquerque.
Vice President: Allen L. Haynes, Clovis.
Secretary-Treasurer: Omar Legant, Albuquerque.
Councillors: Junius A. Evans, Las Vegas, 1959; Aaron E. Margulis, Santa Fe, 1959; Wendell Peacock, Farmington, 1960; George Prothro, Clovis, 1960; Gerald Slusser, Artesia, 1960; W. J. Hossley, Deming, 1961; Guy Rader, Albuquerque, 1961.
Delegate to American Medical Association: Earl L. Malone, Roswell, 1960; Alternate: Samuel R. Ziegler, Espanola, 1960.
Executive Secretary: Mr. Ralph R. Marshall, 220 First National Bank Building, Albuquerque, telephone 2-2102.

P. A. F.  pH⁴

R (Fortified Triple Strength) R

Improved Douche Powder

G-11® (Hexachlorophene USP), deodorant

FORTIFIED—With Sodium Lauryl Sulfate and Alkyl Aryl Sulfonate.

DETERGENT—High surface activity in acid and alkaline media.

LOW SURFACE TENSION—Increases penetration into the vaginal rugae and dissolution of organisms such as Trichomonas and fungus.

HIGH SURFACE ACTIVITY—Liquifies viscus mucus on vaginal mucosa, releasing accumulated debris in the vaginal tract.

Buffered to control a normal vaginal pH.

ETHICALLY PKGED. net wt.
10 oz.\$1.25

Mfg. by G. M. CASE LAB.,
San Diego 16, Calif.

Montana Medical Association

Interim Session, April 3-4, 1959
Helena

President: Herbert T. Caraway, Billings.
President-elect: Leonard W. Brewer, Missoula.
Vice President: Raymond F. Peterson, Butte.
Acting Secretary-Treasurer: W. E. Harris, Livingston.
Assistant Secretary-Treasurer: W. E. Harris, Livingston.
Executive Committee: Herbert T. Caraway, Billings; Leonard W. Brewer, Missoula; Raymond F. Peterson, Butte; W. E. Harris, Livingston; John A. Layne, Great Falls; Edward S. Murphy, Missoula.
Delegate to American Medical Association: Paul J. Gans, Lewiston; alternate, S. C. Pratt, Miles City.
Executive Secretary: Mr. L. R. Hegland, P.O. Box 1692, Telephone 9-2595, Billings.

The Wyoming State Medical Society

Annual Session, June 11-14, 1959
Jackson Lake Lodge

President: L. Harmon Wilmoth, Lander.
President-elect: Benjamin Gitlitz, Thermopolis.
Vice President: Francis A. Barrett, Cheyenne.
Secretary: S. J. Glovale, Cheyenne.
Treasurer: C. D. Anton, Sheridan.
Councillors: Albany County, B. J. Sullivan, Laramie; Carbon County, Guy Halsey, Rawlins; Converse County, Roman Zwalsh, Glenrock; Fremont County, Bernard Stack, Riverton; Goshen County, Joseph Volk, Torrington; Laramie County, S. J. Glovale, Cheyenne; Natrona County, Frederick Haigler, Casper; Sheridan County, Jay Blumenstock, Sheridan; Teton County, Robert Knapp, Pinedale; Uinta County, Joseph Whalen, Evanston; Northeastern Wyoming, Virgil L. Thorpe, Newcastle; Northwestern Wyoming, John H. Froyd, Worland.
Delegate to A.M.A.: A. T. Sudman, Green River, 1960; Alternate, B. J. Sullivan, Laramie, 1960.
Executive Secretary: Mr. Arthur R. Abbey, Cheyenne.

Nevada State Medical Association

Annual Meeting, August 19-22, 1959
Reno

President: Roland Stahr, Reno.
President-elect: Ernest W. Mack, Reno.
Secretary-Treasurer: William A. O'Brien, III, Reno.
Delegate to American Medical Association: Wesley W. Hall, Reno; alternate: Earl N. Hillstrom, Reno.
Executive Secretary: Mr. Nelson B. Neff, P. O. Box 188, Reno; telephone FA. 3-6788.

The Utah State Medical Association

Annual Session, September 15-18, 1959
Salt Lake City

President: U. R. Bryner, Salt Lake City.
President-elect: I. Bruce McQuarrie, Ogden.
Secretary: J. Poulson Hunter, Salt Lake City.
Treasurer: Robert M. Dalrymple, Salt Lake City.
Councillors: Box Elder, 1960, D. L. Bunderson, Brigham City; Cache Valley, 1960, C. J. Daines, Logan; Carbon County, 1960, A. R. Demman, Helper; Central Utah, 1959, Stanford Rees, Gunnison; Salt Lake, 1960, Richard W. Sonntag, Salt Lake City; Southern Utah, 1960, James S. Prestwich, Cedar City; Uintah Basin, 1960, R. Bruce Christian, Vernal; Weber County, 1958, I. Bruce McQuarrie, Ogden; Utah, 1959, R. E. Jorgenson, Provo.
Executive Committee: Reed W. Farnsworth, Chairman, Cedar City; James Z. Davis, Salt Lake City; Leslie B. White, Salt Lake City; J. Poulson Hunter, Salt Lake City; Robert M. Dalrymple, Salt Lake City.
Delegate to American Medical Association, 1957-1959: Kenneth B. Castleton, Salt Lake City; Alternate, Drew Petersen, Ogden.
Executive Secretary: Mr. Harold Bowman, Salt Lake City.



you have moved please notify
the Rocky Mountain Medical
Journal, giving your old, as well
as your new address.



you have any interesting case
reports or scientific articles,
please send them to the Scien-
tific editor in your state for pos-
sible publication in the Rocky
Mountain Medical Journal.



The names and addresses are
listed on page 2 of this issue.

Organization cont. from 106

The above pertains *only* to care of military personnel, and should *not* be confused with the established procedures for the processing of claims for care of eligible military dependents under Medicare.

American Board of Obstetrics and Gynecology

The next scheduled examinations (Part II), oral and clinical, for all candidates will be conducted at the Edgewater Beach Hotel, Chicago, Illinois, by the entire Board from May 8 through 19, 1959. Formal notice of the exact time of each candidate's examination will be sent him in advance of the examination dates.

Candidates who participated in the Part I examinations will be notified of their eligibility for the Part II examinations as soon as possible.

Current bulletins of the American Board of Obstetrics and Gynecology, outlining the requirements for application, may be obtained by writing to the Secretary, Robert L. Faulkner, M.D., 2105 Adelbert Road, Cleveland 6, Ohio.

Rheumatic fever cont. from 41

REFERENCES

- ¹Massell, B. F.; Sturgis, G. P.; Knobloch, J. D.; Streeter, R. B.; Hall, T. N., and Norcross, P.: Prevention of Rheumatic Fever by Prompt Penicillin Therapy of Hemolytic Streptococcal Respiratory Infections, *J.A.M.A.* 146:1469-1474, Aug. 18, 1951.
- ²American Heart Association, Committee on Prevention of Rheumatic Fever and Bacterial Endocarditis, Prevention of Rheumatic Fever and Bacterial Endocarditis Through Control of Streptococcal Infections, *Mod. Concepts Cardiovas. Dis.* 25:365-369, 1956.
- ³Markowitz, M.; Ferency, C., and Bonet, A.: A Comparison of Oral and Intramuscular Benzathine Penicillin G for the Prevention of Streptococcal Infections and Recurrences of Rheumatic Fever, *Pediatrics* 19(2):201-207 (Feb.), 1957.
- ⁴Zukel, W. J.: Prevention of Secondary Attacks of Rheumatic Fever, *Public Health Reports*, 72:895-901 (Oct.), 1957.
- ⁵Bland, E. F., and Jones, T. D.: Rheumatic Fever and Rheumatic Heart Disease: A twenty-year report on 1000 patients followed since childhood. *Circulation* 4:836-843, December, 1951.

Newton

Optical Company

GUILD OPTICIANS

Catering to Medical Profession Patronage

Phone KEystone 4-8714

309-16th Street

Denver

In potentially-
serious
infections...

® TRADEMARK, REG. U. S. PAT. OFF.

® TRADEMARK, REG. U. S. PAT. OFF.—THE UPJOHN
BRAND OF TETRACYCLINE

® TRADEMARK, REG. U. S. PAT. OFF.—THE UPJOHN
BRAND OF CRYSTALLINE NOVOBIOIN BODINE

® TRADEMARK

The Upjohn Company, Kalamazoo, Michigan

Upjohn

